WEST BENGAL DISTRICT GAZETTEERS

HOOGHLY

By

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of the Indian Administrative Service

FORMERLY STATE EDITOR

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PREFACE

The present volume is the fourth in the series of West Bengal District Gazetteers now being written under a scheme jointly sponsored by the Union and the State Governments; those preceding it were on West Dinajpur, Bankura and Malda in that order. Although the initial plan was to revise the outdated Bengal District Gazetteers published in the first quarter of the present century and popularly called the "O'Malley's Series", we found on getting down to the task that the available fund of knowledge on virtually every subject falling within the scope of a treatise of this kind had meanwhile swelled to such an extent that it would have been most unfortunate not to make full use of the same on the ground that our assignment was limited by the narrow standards set during the British regime more than half a century ago. The arrangement of the text prescribed by the Government of India and followed here actually encouraged a liberal use of this wealth of information garnered by numerous scholars in various disciplines over the last several decades. Apart from original contributions of our own (the extent of which is by no means negligible), we admit to have freely drawn from that wonderful storehouse of erudition as the detailed treatment of subjects in the present volume will bear out. How far we have succeeded in this difficult task is best left to the discerning readers.

The manuscript of the present volume was sent to the press in April 1969 and I relinquished charge of my office as State Editor, West Bengal District Gazetteers in September of the same year. The first 176 pages of the text were finally printed off during my term of office while the printing of the rest of the volume was done under the supervision of my successor, who has placed me under a deep debt of gratitude for undertaking this arduous task.

According to the prevailing procedure, the original draft was processed successively by the Central Gazetteers Unit and the West Bengal District Gazetteers Advisory Committee, the latter consisting of, besides myself, Sri B. Sarkar, I.C.S. (Retd.) as Chairman and Prof. Nirmal Kumar Bose, F.N.I., Dr. Nalinakshya Datta, M.A., Ph.D., D.Litt., Dr. Bhabatosh Datta, M.A., Ph.D., Prof. Sashi Bhusan Chaudhury, M.A., Ph.D.. Prof. Pratul Chandra Gupta, M.A., Ph.D. and Dr. P. N. Chopra, M.A., Ph.D as members. I am deeply indebted to them all for their kind and helpful suggestions for improving the contents and quality of the draft.

To Sarvasri Ramesh Chandra Majumdar, Subodh Chandra Sengupta, Narendra Krishna Sinha, Swami Ranganathananda, Sashi Bhusan Chaudhury, Bimala Prasad Mukherji, Sisir Kumar Ghosh, Dilip Kumar Biswas, Jitendra Mohan Mohanty and Nirmal Sinha—recognised experts in their respective fields of study—I owe a deep debt of gratitude for their learned contributions used in the Appendices which may be rightly regarded as an asset to this volume.

My thanks are due next to the entire team of officers and staff of the Gazetteers Unit who shared my ordeals in facing a challenging task. Although the present volume is the product of their joint efforts, I alone am responsible for the final presentation of the text in its entirety.

Numerous Central and State Government Departments and various branches of the Hooghly district administration rendered valuable assistance by supplying all kinds of information and data. The Anthropological, Botanical, Geological and Zoological Surveys as also the Deputy Director-General of Observatories, Poona helped us with their technical reports. The Geographical Society of India kindly prepared the maps included in the volume. The authorities of the National Library, Asiatic Society Library, West Bengal Secretariat Library, Bangiya Sahitya Parishad Library, Commercial Library and the State Archives gave us all the facilities we needed. Non-official institutions, agencies and individuals, too numerous to mention, also cooperated in ample measure. I am deeply indebted to them all.

Thanks and high praise are also due to the management of Sree Saraswaty Press Ltd. for their efficient printing, block-making and binding which have made the present volume as presentable as it is.

A key to the diacritical marks used in the text, albeit sparingly, is given with the Index at the end of the volume. The photographs are my handiwork and their copyright is held by me.

AMIYA KUMAR BANERJI

ADDENDUM

Preface—read Tapan Raychaudhuri after Jitendra Mohan Mohanty

ACKNOWLEDGEMENT

The present State Editor acknowledges his indebtedness to Sri Amiya Kumar Banerji, I.A.S., during whose tenure in office the draft of the present volume was prepared, for having taken great pains in spite of the pressing duties of his present office, to prepare the manuscript for the press and for supplying the photographs printed in this volume. The undersigned also expresses his deep gratitude to Dr. P. N. Chopra, M.A., Ph.D., Editor (Gazetteers), Ministry of Education and Youth Service, Government of India, and to members of his staff for the very painstaking scrutiny of the draft and for making useful suggestions for the improvement of the quality of this volume. Thanks are also due to the officers of this office and to other members of the staff for commendable work done in the matter of reading the proofs, preparation of the index and for processing the data for the preparation of the maps printed in this volume.

D. Majumdar
State Editor

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CHAPTER I

GENERAL & PHYSICAL ASPECTS

INTRODUCTORY

The place-name 'Hooghly'* has had a geographical connotation only since the middle of the 16th century. With the advent of the Portuguese and, subsequently, of other European traders into this part of the country, many of the erstwhile obscure villages on the west bank of the Bhagirathi† were transformed into urban areas forming, in course of time, the principal towns of the present-day district. Hooghly, at the initial stage of such growth and development, was the foremost of the metamorphosed villages which lent its name to the district when it started taking shape as an administrative unit under the British towards the close of the 18th century.

Origin of the name of the district

The origin of the name of the district cannot be accurately determined in point of time. The name seems to have emerged with the silting up of the Saraswati, which commenced in the 16th century, and the settlement of the Portuguese first at Satgaon (Saptagram) in A.D. 1537-38[1] and then at Bandel and Hooghly. By the end of the 16th century, Hooghly (the Portuguese called it Porto Pequeno) replaced Satgaon as the most important port for western Bengal and in course of time the district came to be named after this thriving port-city which was then the nerve-centre of European trade in eastern India.

In maps of this and neighbouring regions drawn by Jao de Barros in A.D. 1550, there is no mention of any place called Hooghly. But about 1588, Ralph Fitch found 'Hugeli' in the sole possession of the Portuguese. Various old documents of the 16th and the 17th centuries, quoted in Colonel Yule's edition of *Hedge's Diary* spelt the name differently as Hugly, Hughley, Hughly, Hukely, Hukley, Hewgly and Hewghly. Hamilton, writing in the beginning of the 18th century, mentioned it as Hughly; Ives, in the middle of the same century, spelt it as Houghley and Stavorinus (1769) used the spelling Hooghly. Francis, who was a frequent visitor to the place around 1779, preferred to call it Hughley or Hughely. In Seton Karr's

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* This spelling has come to stay as fixed by historical and literary usage. W. W. Hunter, however, spelt it as 'Hugli' representing the corresponding Bengali pronunciation more closely.

† For some unaccountable reason, the name of the river Bhagirathi has been anglicised into 'Hooghly' and widely used as such. The former appellation, having hoary associations, has been preferred in the present text.

[illegible] from the *Calcutta Gazette*, the Gazette of [illegible] 1784, in a rhapsody on Bandel, spelt the name as [illegible]. In Long's *Selections*, a quotation from the Proceedings of the Council of the 29th October 1763 rendered it as Hooghley. The anonymous traveller, quoted by Wilson in his *Early Annals of the English in Bengal*, describing the place in 1712 called it Hughly. Various other spellings are—Ogouli by Bernier and Tavernier, Ugolim by Bocarro (1644), Oegli by Mathews Van den Broucke (1660) and Gollye by Hughes and Parker (1620).

The Portuguese could not have any vested interest in Hooghly prior to the sixth decade of the 16th century as the great Portuguese historical treatise *Da Asia* (Vols. I to III of which were published between A.D. 1552 and 1563) makes no mention of the place. But at least an embryonic Portuguese settlement must have had taken root at Hooghly by 1580 in which year Mirza Nazat Khan, Akbar's *Faujdār* at Satgaon, being defeated by Katlu Lohani of Orissa, fled to the Portuguese Governor of Hooghly.[2] O'Malley wrote: "From the fact that Federici (the well-known Venetian traveller who visited Saptagram around A.D. 1570—Ed.) does not refer to Hooghly but only Satgaon, it would appear that the village was not then of sufficient importance to be mentioned separately from Satgaon, of which it evidently formed a part at the outset."[3] It is, therefore, commonly believed that the Portuguese settled at Hooghly about or immediately after 1575 with the permission of the Emperor Akbar and thus brought the present name of the place to prominence. According to Jadunath Sarkar: "Before the Portuguese settlement, the petty village of Hughli contained only a number of straw huts and bamboo stockades in which the visiting Portuguese ships used to sell their cargo of salt from Hijli and which they evacuated when the transaction was over. It was called a *ganj* or mart (which Persian word is disguised as *chandeu-gandja* in Cabral's narrative, Luard, p. 392). A store-house of salt (or any other commodity) is called in Bengali a *gola*, and this word in the mouth of the Portuguese became O-GOLIM, (O being the definite article in the Portuguese language and a nasal suffix being added to most Indian place-names by these people). The Bengalis turned O-goli into *Hugli*."[4] But this opinion has often been challenged. Shumbhoo Chunder Dey wrote: "It is commonly believed that Hooghly is a corruption of Golin, the name by which it was known to the Portuguese; but this is only reversing the natural order of events, the fact being that Golin was a corruption of Hooghly, and not Hooghly a corruption of Golin. The name Hooghly was derived from *hogla* reeds,* with which the place was for the most part covered; and as *hogla* easily slides into *gola*

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* These are aquatic marshy plants, 6 to 12 feet (1.66 to 3.83 m.) high, (the Latin name being *Typha angustata*) found abundantly in standing fresh water or slow moving water which does not dry up during the hot season.—Ed.

[illegible] correctly, changed it to Golin. In the *Ain-i-Akbari*, which, as is well known, was written in 1596 A.D., Abul Fazl calls the place Hughli, whereas in Faria Souza's *Asia Portuguesa*, which was written some years afterwards, it is called Golin. In Hughes and Parker's Letters, too, which are dated December 1620, the latter name appears with this little difference, that while in Souza's history there is but one 'l', in the Letters it is spelt with a double 'l'. In the Dutch memoir of Broucke (Van den Broucke—Ed.), which was written in 1660, the name appears as *Oegli* or *Hoegli*, which approaches nearer to the native name than the *Golin* of the Portuguese. All these circumstances plainly show that the name is not an exotic, but a plant indigenous to the soil."[5] Incidentally, it might be of interest to note that the English equivalent of the Portuguese word *golā* is the neck or the outwork of a bastion. The place-name Hooghly might have, therefore, some connexion with the local Mughal castle captured by Cervalius or with other fortifications built by the Portuguese in its vicinity.

Another theory relates the origin of the name Hooghly to 'Golgot' which was the appellation given to the spot at Hooghly where the English had built their factory. The nearest Portuguese equivalent of this word is Golgota or Golgotha which means a place of martyrdom.[6] In this connexion the following passage from 'Leaves from the Editor's Notebook' of *Bengal: Past and Present* might be quoted: "The Portuguese seem to have called the place the English called Golgot by the name Golin or Ugolyn. The Gholghat is still well known to natives of Hugli and is identified with a spot about the middle of the town of Chinsurah. The word has no connection with the sacred 'Golgotha' but simply commemorates a little whirlpool."[7] Elaborating this point further Lieut.-Col. D. G. Crawford wrote a letter to Firminger, the then editor of *Bengal: Past and Present*, which read: "Of course, it is derived from a mixture of 'Golghat', the old name for Hughli, and Kalikata, which sounds not unlike Golgotha. No doubt the river banks have changed their appearance several times in the past two and a half centuries. But curiously, a large whirlpool or 'Golghat' is still the most marked feature of the bank of the river on the Hughli side. It lies just in front of the jail, about 100 yards south of the Jubilee Bridge."[8] But all said and done, the transformation of Golgot, Golgota, Golgotha, Golghat or Gholghat into Hooghly appears to be a remote philological possibility.

Location and general boundaries

The present Hooghly district is one of the six constituent units of the Burdwan Division and extends between 22° 39′ 32″ (right bank of the Rupnarayan river) and 23° 01′ 20″ (Guptipara Char on the Bhagirathi river) north latitudes and between 87° 30′ 20″ (Fului village of the Goghat police station) and 88° 30′ 15″ (Bhabani-

pur Char on the Bhagirathi river) east longitudes.[9] It is bounded on the east by the meandering Bhagirathi, along the centre of the course of which runs the eastern boundary line demarcating, towards the north, the Sadar subdivision of the district from the Ranaghat subdivision of the Nadia district and, towards the centre and the south, the Chandernagore* and Serampore subdivisions from the Barrackpore subdivision of the 24-Parganas district. Except on the east, the boundaries, barring short distances covered by the Rupnarayan to the south-east, the Damodar to the south and the Dwarakeswar and the Tarajuli to the north-west, are artificial. The adjoining districts are: Burdwan (Kalna and Burdwan Sadar subdivisions) to the north, Bankura (Vishnupur subdivision) to the north-west, Midnapur (Midnapur Sadar and Ghatal subdivisions) to the west and south-west and Howrah (Uluberia and Howrah Sadar subdivisions) to the south.

Size, shape, total area and population of the district

The longitudinal extent of the district is much greater (approximately 2.8 times) than the latitudinal. Its approximate shape is like that of a butterfly, the western wing of which is much smaller than the eastern counterpart, the two segments being separated from each other by the embanked Damodar river flowing from north to south. The area of the district, as furnished by the Survey of India, is 1,216 sq. miles (3,149.4 sq. kilometres). The 1961 Census, however, puts it at 1,212.1 sq. miles or 3,139.3 sq. kilometres.[10] The discrepancy of 3.9 sq. miles (or 10.1 sq. kilometres) cannot be readily reconciled and the anomaly may perhaps be attributed to the difference in the modes of computation of the two figures.[11] According to a recent (1965) Census publication, 3,026.7 sq. kilometres (1,168.6 sq. miles) and 112.7 sq. kilometres (43.5 sq. miles) of the district comprised rural and urban areas respectively.[12] Of all the districts of West Bengal, Howrah alone is smaller in size than the district of Hooghly. At the time of the 1961 Census, the district had a population of 22,31,418 of which 11,79,267 were males and 10,52,151 were females and the density of population was 1,841 persons per sq. mile. Due to the merger of Chandernagore, a former French possession, there has been a net accretion of 9.7 sq kilometres (3.7 sq. miles) of territory. In size and population, the district held, in 1961, the 14th and 6th places respectively (in 1951 the order was 12th and 7th) among the 15 districts of West Bengal.[13]

* According to Sub-sec. (i) of Sec. 3 of Chandernagore (Merger) Act, 1954, the former French possession of Chandernagore was merged with West Bengal. Thereafter, it was declared to be a police station, *vide* Government of West Bengal Notification No. 4221 PL dated 2.10.54 and included in the Hooghly district under Notification No. 3535 G.A. dated 2.10.54. Notification No. 3536 G.A. dated 2.10.54 divided the district into four subdivisions, namely Hooghly Sadar, Chandernagore, Serampore and Arambagh and Notification No. 3537 G.A. dated 2.10.54 defined the local limits of these four subdivisions and transferred the police stations of Bhadreswar, Singur, Haripal and Tarakeswar from the erstwhile Serampore subdivision to the newly created Chandernagore subdivision.

Subdivisions, police stations and *mauzās*

The district consists of four subdivisions, namely Hooghly (Sadar), Chandernagore, Serampore and Arambagh. Chinsura is the headquarters of the district and of the Hooghly (Sadar) subdivision. It is also the headquarters of the Burdwan Division and the Western Range of the police administration of the State. The towns of Chandernagore, Serampore and Arambagh are the headquarters of the three other subdivisions.

The district comprises twenty police stations at present as against nineteen prior to 1965 when the Dadpur police station was carved out of the Polba P.S. in the Hooghly (Sadar) subdivision.* The Hooghly (Sadar) subdivision has thus seven police stations: Chinsura, Balagarh, Magra, Pandua, Polba, Dadpur and Dhaniakhali; Chandernagore has five: Chandernagore, Bhadreswar, Haripal, Singur and Tarakeswar; Serampore has four: Serampore, Uttarpara, Chanditala and Jangipara; and Arambagh has four: Arambagh, Pursura, Khanakul and Goghat.

At present the district has fifteen towns of which eleven are municipal and the rest are non-municipal. The Hooghly (Sadar) subdivision has two municipal towns, Hooghly-Chinsura and Bansberia and one non-municipal town Pandua. There are three municipal towns in the Chandernagore subdivision, namely Chandernagore, Bhadreswar and Champdani and two non-municipal towns, Singur and Tarakeswar. The largest number of towns—five municipal and one non-municipal—are located within the Serampore subdivision of which the municipal towns are Serampore, Baidyabati, Rishra, Konnagar and Uttarpara-Kotrung† and the non-municipal one

* The Dadpur P.S. came into being under the Government of West Bengal Notification No. 580 PL dated 30.1.65 and consists of the following 98 *mauzās* the corresponding J L. Nos. of which are mentioned within brackets: Bakkeswar (1), Goai (2), Amra (3), Kamrai (4), Maura (5), Sarkhola (6), Hanral (7), Hamidpur (8), Haur (9), Dampur (10), Nagbal (11), Purba Sikta (12), Kunchpala (13), Satithan (14), Dighagari (15), Dumurpur (16), Dighanswar (17), Puinan (18). Mogalpur (19), Jagannathpur (20), Nabagram (21), Durgadaspur (22), Kantul (23), Anantapur (24), Krishnapur (25), Srirampur (26), Samsara (27), Beraberi (28), Kagnan (29), Makhalpur (30), Paschim Sikta (31), Dhemua (32), Alipur (33), Hasnan (34), Hodla (35), Aima (36), Kantagare (37), Sekendarpur (38), Kharsat (39), Rasulpur (40), Bansdarun (41), Bhabanipur (42), Khidirpur (43), Dakshin Dadpur (44), Maheswarpur (45), Tamila (46), Goe (47), Purut (48), Barasara (49), Ghatampur (50), Kankuria (51), Badishta (52), Ishta (53), Jhauband (54), Ganespur (55), Ati (56), Nabasan (57), Kadipara (58), Uttar Babnan (59), Amria (60), Mahishdanga (61), Gobindapur (62), Danrpur (63), Gunpala (64), Mulgram (65), Beta (66), Daulatpur (67), Sarap (68), Nonadanga (69), Munsar (70), Paschim Narayanpara (71), Dakshin Babnan (72), Komdhara (73), Bilarpur (74), Khurigachhi (75), Aima Haripur (83), Payan (84), Harpur (85), Panjipukur (86), Chanda (87), Badinan (88), Basta (89), Kharari (90), Harit (91), Desui (92), Ichhapur (93), Hadilpur (106), Balikukhari (107), Talchinan Sanihati (108), Popai (109), Mirkhila (110), Aima Samsara (112), Kesabpur (113), Chaupala (114), Dhanijpur (115), Goswami Malipara (116), Dantra (117) and Bhushali (119).

† Prior to August 1964, Uttarpara and Kotrung were two adjacent municipal towns. Under the Government of West Bengal, Local Self-Government Department Notification No. 4509/M-1M-134/63 dated 3.8.64, the two municipalities were united to form the Uttarpara-Kotrung Municipality with effect from 16.8.64,

is the Nabagram Colony. Except Arambagh, which has a municipality, there is no other town, municipal or otherwise, in the whole of that subdivision.

According to the Census of 1961, the total number of *mauzās* borne on the Jurisdiction Lists was 1,999 of which only 35 were uninhabited and 53 were wholly included in the urban areas of the district. The figures below would indicate the changes in the number of inhabited villages in the district over the sixty-year period from 1901 to 1961.*

Year	1901	1911	1921	1931	1941	1951	1961
No. of inhabited villages	2,383	2,202	2,187	2,180	1,908	1,906	1,911

The shifting course of the Bhagirathi has for a long time necessitated administrative adjustments in respect of *char* lands between the Hooghly and Nadia districts on the one hand and the Hooghly and 24-Parganas districts on the other. These lands have always been a source of litigation and those occupying them have often been at a loss to understand which district authority they should approach for settlement of their disputes.

Formation of the district as an administrative unit

The district of Hooghly, as we know it today, came into existence in 1795.[14] "After the office of the Fouzdar had been abolished, Hooghly was thrown into the back-ground in which obscure position it continued till it was again brought to the front by being formed into a district in 1795." Previous to this, the town of Hooghly and some parts of the district were within the jurisdiction of Nadia.[15] But the major part of it was carved out of the district of Burdwan which had been ceded to the East India Company in 1760. Other portions which were not included within the Burdwan Raj had been given to Clive and had formed a part of his personal *jāgir*.[16] "It was not until the cession of the Dewani in August 1765 that the whole district was brought under the same system of administration."[17]

The district on its first formation was placed under the charge of Hon'ble C. A. Bruce, who became its Judge and Magistrate although the Collector of Burdwan still retained his jurisdiction in revenue matters over this area.[18] "This officer corresponded direct with the Governor-General in Council, and was altogether a person of greater influence and importance than the district officer of the present day. Proposals were made even thus early to constitute Hooghly into a separate Collectorate, but they did not then get beyond the stage of discussion. It is in this correspondence that I find the Government revenue of the Burdwan Collectorate (including Hooghly) stated as sicca Rs. 47,26,318, out of which sicca

* The reasons for the progressive decline in the number of inhabited villages have been discussed under the section 'Population' in Chapter III.

Rs. 20,83,218 was to be paid in the proposed new Collectorate of Hooghly. I find no record of the exact criminal jurisdiction of Mr. Bruce's charge until several years later. Parganas Panduah and Kismat Khosalpore were, however, transferred to it from Burdwan in 1795. In 1809 the Judge and Magistrate was also styled 'Superintendent and Commissioner of Chinsurah, Chandernagore, and Serampore'. In 1814 the thanas of Bydyabati and Rajapore were transferred from the 24-Parganas to Hooghly, and on the 1st January 1815 the district stood as shown in the following table.[19]

"Period	Name of Police Station	No. of villages 1810	No. of villages 1819	Remarks
In 1795	Hooghly	161	174	
	Bansberia	98	89	
	Benipore	197	194	Now Balagarh
	Pandua	191	209	
	Dhaniakhali	395	372	
	Haripal	184	174	
	Rajbalhat	271	239	Now Kistanagar
	Jehanabad	335	310	
	Dewangunj	262	200	Now Goghat
	Chunderconah	390	292	Now in Midnapore district
	Ghattal	157	155	Now in Midnapore district
	Bagnan	354	359	Now in Howrah district
	Ampta	132	129	-do-
Added in 1814	Rajapore	—	210	-do-
	Bydyabati	—	230	
Added in 1819	Kotra	—	203	-do-
	Uliubaria	—	248	-do-
Added in 1831	Chinsurah	—	—	
	Total	3,127	3,787 "	

According to S. C. Dey, Mr. Bruce held criminal jurisdiction over 13 police stations, namely Hooghly, Bansberia (now Magra), Benipur (now Balagarh), Pandua, Dhaniakhali, Haripal, Rajbalhat (now Jangipara), Jehanabad (now Arambagh), Dewangunj (now Goghat), Chandracona and Ghatal (both now in Midnapur district), and Bagnan and Ampta (both now in Howrah district). The Baidyabati and Chinsura police stations came to be added to the district later.[20] This officer was in charge of the district till 1799. The regime of his successor, Thomas Brooke, was characterized by serious attempts at enforcing law and order as banditry had become a widespread menace to the district at the time. Thomas Brooke was succeeded by Ernest, "who, in addition to his proper title of Judge-Magistrate, was in 1809, also styled 'Superintendent and Commissioner of Chinsura, Chandernagore and Serampur', these cities having, in the interim, come into the hands of the English."[21] In several foot-notes, S. C. Dey has supplied the following supplementary information: "Chinsura was taken possession of by the

English on the 28th July, 1795 and they did not restore it to the Dutch until the 20th September, 1817. It was finally ceded to them in 1824. ...Chandernagore was captured for the second time by the English in 1794, and it continued in their hands till 1815 when it was given up. ...Serampore was taken by the English in 1808 and it was not restored to the Danes until the Waterloo year. It was finally ceded to the English in 1845, when the Hon'ble L. Lindhard was its Governor. Serampur is held *khas* by Government and is under the management of an officer who is called the *Khas Tehsildar*."[22] But the district did not have a full-time Collector yet. In 1817, A. Ogilvie was deputed as the first Assistant Collector of Hooghly and he may be considered as the first Subdivisional Officer appointed to the district.[23]

"In 1819 Mr. R. Saunders was appointed 'Collector of Government Customs and Town Duties at Hooghly' and the Governor-General in Council was pleased 'to annex to the above office the charge of the collection of the land and sayer revenue in the mehals at present, under the Assistant Collector at Hooghly'. ...The river jurisdiction of the Judge and Magistrate was at this time from the Bali Khal to Gokulgunj, nearly opposite to Santipore. The desirability of making the civil, criminal, and revenue jurisdiction conterminous was considered by the Governor-General in Council. The difficulty in doing so arose from the disregard for a long series of years of the ancient local divisions of parganas, and the extraordinary manner in which the lands of most of the parganas were scattered and mixed up. ...The final orders of Government on the separation of the two Collectorates (of Burdwan and Hooghly—Ed.) were not received until January 1821, and it was to take effect from 1st May 1822. The Collector of Hooghly was ordered to go to Burdwan and sort and bring away the records relating to his charge. If the zemindars of estates lying within each boundary did not make a final selection of the district into the treasury of which they would pay their revenue, the Collector was to choose for them. The land revenue of the new district (Hooghly) was Rs. 11,23,474, and the stamp, abkari, and other revenue about Rs. 76,526, making in all twelve lakhs of sicca rupees, as against thirty lakhs which remained as the revenue of Burdwan and the Jungle Mehals."[24]

The subsequent history of the formation of the district as a compact administrative unit may best be summarized in the words of Toynbee: "In 1824 the Magistrate complains of the want of a map of his district:—'The boundaries of the foreign settlements and suburbs of Calcutta are very indefinite, and lead to constant trouble.' ...In 1826, on the people of thana Chunderkona representing the hardships they were put to in coming to Hooghly for criminal cases, the criminal jurisdiction was transferred to Midnapore, the revenue jurisdiction remaining with Hooghly. In 1837 the Magistrate

brought to the notice of Government the extremely inconvenient arrangement of the thana jurisdictions, which caused much hardship to the people. Thus Chanditolah was in thana Rajapore, nine miles off, instead of being in Bydyabati, which was quite close. Mellia, where there was an indigo factory, was in thana Bydyabati, nine miles off, instead of being in Haripal, only one mile distant. These matters were gradually rectified. The separation of the magisterial jurisdiction of Howrah from that of Hooghly was carried out under Government Orders No. 268 dated 27th February 1843. Thanas Ulubaria, Kotra (Shampore), Rajapore, and Bagnan were transferred to the 24-Parganas, and Mr. William Tayler, was appointed as Joint-Magistrate of Howrah with jurisdiction over Howrah and Sulkea. ...Early in 1845 the Government became fully alive to the necessity of establishing subdivisions for the better supervision of the police and convenience of the people, and before the close of that year, with which this narrative ends, Mr. L. S. Jackson had been stationed at Dwarhatta as subdivisional officer of the present Serampore subdivision. Babu Issar Chunder Ghosal, Deputy Magistrate, was sent in a like capacity to Keerpoy to take charge of the subdivision now called Jehanabad."[25]

In 1839 there were in all 9 Munsiffees in the district located at Hooghly, Naya Sarai, Mahanad, Baidyabati, Rajapur, Dwarhatta, Khirpai, Bali and Uluberia. With the establishment of two subdivisions in 1845 with headquarters at Dwarhatta and Khirpai, a new era of civil administration began in Hooghly.[26] In 1859 the posts of Magistrate and Collector were combined. But it was only in 1879 that the district assumed more or less its present dimensions with the final delimitation of the subdivision of Arambagh.

In February 1843, the magisterial charge of Howrah—which then consisted of the Salkea, Amta, Rajapur, Kotra and Bagnan police stations—became distinct from that of Hooghly.[27] Since then several minor changes have taken place. In 1846 the thana of Raona (Raina) was transferred temporarily from Burdwan to Hooghly. In 1872 the thanas of Jehanabad and Goghat were transferred from Hooghly to Burdwan and in the same year the police stations of Ghatal and Chandrakona were similarly transferred to Midnapur. But in 1879 Jehanabad and Goghat came back to Hooghly. In 1894 the outpost of Singti was transferred from Hooghly to Howrah. The next change in the area of the district was effected after a lapse of 56 years when on 2 May 1950 the Government of India took over the French territory of Chandernagore from its French administrators and this was ratified by the Indian Parliament on 9 June 1950. Subsequently, the Chandernagore subdivision was created on 2 October 1954.[28] The latest of such changes took place only in July 1966 when the village of Sahlalpur was added to the Hooghly district from the Raina police station of Burdwan.[29]

'OPOGRAPHY

Being a part of the flat plains of the lower Gangetic delta, the topographical homogeneity of the district is remarkable. On the vast aggradational surface the only marked topographical variations are those associated with the numerous shifts and diversions of the rivers, an unequal aggradation rendering some surface above flood-level and others below water-table. The slopes of broad interfluves or doabs (*dô*=two, *āb*=water) are barely, if at all, perceptible, the only noticeable relief being the floodplain bluffs and embankments. There are, however, important surface differences within the general pattern of alluvial plains calling for a more detailed study.

Natural divisions

The district may be broadly divided into two main natural divisions, the plains and the uplands, the river Dwarakeswar forming the dividing line between the two.

The plains: variations in sea-level and lines of natural drainage

The tract of land lying between the Bhagirathi and the Dwarakeswar is a flat alluvial plain intersected by a number of sluggish rivers and streams. The area displays some of the most classical examples of old streams, perennial or intermittent, occupying young valleys. Many of these valleys have so complicated a history that their successive stages of development cannot always be determined in detail or with certainty. But, on the whole, this part of the country slopes gradually from the north and west towards the south and east as is indicated by the flow of the water courses, the slopes of which, however, vary from a couple of inches to more than a foot per mile. The gradual rise of the ground level from the east towards the west is indicated by the fact that Champadanga on the Damodar is 8 feet (2.4m.) and Arambagh 22.5 feet (6.86m.) higher than Baidyabati in the extreme east on the bank of the Bhagirathi. The level of this particular interfluve, covering more than 1,000 sq. miles (2,590 sq. km.) or nearly $\frac{7}{8}$ths of the district, varies from 50 feet (15.2m.) to 8 feet (2.4m.). The general relief of this tract will be evident from the following mean elevations above sea-level.

Police Station	Mean elevation above sea-level (in ft.)	Mean elevation above sea-level (in metres)	Police Station	Mean elevation above sea-level (in ft.)	Mean elevation above sea-level (in metres)
Arambagh	50.5	15.4	Balagarh	24.5	7.5
Pursura	50.5	15.4	Polba	24.5	7.5
Dhaniakhali	42.5	13.0	Jangipara	22.5	6 9
Pandua	36.5	11.1	Singur	21.5	6.6
Tarakeswar	36.5	11.1	Bhadreswar	18.5	5.6
Haripal	30.5	9.3	Chanditala	16.5	5.0
Chinsurah	28.5	8.7	Serampore	12.5	3.8
Magra	26.5	8.1	Uttarpara	10.5	3.2

At Chinsura and Magra, which are higher than Balagarh and Polba, there is a definite break in the general north-west to south-east gradient. Utilizing this natural break in the slope, the Damodar originally joined the Bhagirathi at Naya Sarai, 39 miles (62.8km.) above Calcutta, till the 18th century when floods burst its embankments

and diverted its course. This is all the more confirmed by the sudden declivity in the bed of the Bhagirathi between Dumurdaha and Hooghly.* The effect of the relatively higher elevation of this part of the country has been an interesting matter of speculation for hydrologists. This has been dealt with in the next section on 'River System and Water Resources'.

Subregions within the flat alluvial plains

The flat alluvial plains may again be subdivided into three regions, namely (*i*) the Dwarakeswar-Damodar interriverine plain, (*ii*) the Damodar-Bhagirathi interriverine plain and (*iii*) the *char* lands and the meander loops.

The Dwarakeswar-Damodar interriverine plain

The average slope between the Dwarakeswar and the Damodar is 2.5 feet per mile which is rather less than that of the Damodar itself immediately above Jujuty where the slope is 2.83 feet per mile. Parts of this area are low-lying and so ill-drained that seasonal marshes have formed. Besides, the region is liable to floods during the rainy season, particularly in the areas between (*a*) the Kana Nadi on the east and Khanakul to the south and (*b*) the old course of the Kana Nadi to the east (along Khanakul, Anantanagar, Kamarhati, Senhati, Rajhati, Barbari, Nandanpur, Banhijli, Sundarpur and Markhana) and the Rupnarayan to the west. The latter tract is studded with streams, swamps and embankments. Here the action of running streams in wearing their channels has practically ceased and, under the existing conditions of discharge and channel characteristics, is less than sufficient for transportation of their loads. Except where protected by embankment this region is susceptible to constant floods as the big rivers bounding this tract, namely the Dwarakeswar and the Damodar, are gradually having their beds raised by annual deposits of silt and sand. The crops being liable to sudden and unpredictable submersion, cultivation in this area is precarious and more so in the lands adjoining the Mundeswari because its constantly shifting banks are neither embanked nor clothed with thick vegetative cover to prevent soil erosion and consequent increase in the load of the streams. This baneful geographical condition has been the principal cause of the Pursura police station being one of the most backward areas in the district. "The smaller streams also come down in flood, and frequently change their courses, intertwining with one another in the lower parts of their courses in the most unexpected way. They also add to the general uncertainty of the crops, for if they deposit alluvial silt, excellent *rabi* crops are raised, but if sand, the land becomes sterile. ...The general effect, however, is that the land level is being slowly raised, and in

* "From Balagarh to Dumurdaha, 14½ miles, the maximum slope (of the Bhagirathi) increased to 3.5 inches and then suddenly to 6.3 inches per mile between Dumurdaha and Gauripur opposite Hooghly, a distance of 10½ miles. From Gauripur to Palta, 9½ miles, the maximum slope fell to 4 inches per mile, and became normal again at 3.2 inches per mile between Palta and Kidderpur." (Report on the Hooghly River and its Head-waters, Vol. I, Calcutta, 1919. p. 86).

time the greater part will probably be raised so high as to be above ordinary floods."[30] O'Malley's contention that the land is gradually rising above flood level has, however, been challenged. The flood plains and the levels of the river beds are rising *pari passu* but the latter at a faster pace. "The floods, confined within embankments and unable to spill and deposit on the land as was intended by Nature, are depositing a portion of the silt-contents within the river beds which are gradually rising. The Irrigation engineers in Bengal are thus faced with the most unenviable situation created by the lowering of land to be drained and rise of river beds into which the drainage has ultimately to be disposed of, and in some area it has already become impossible to drain by gravity."[31] The gradual rise of the river beds necessitating higher and higher embankments and the rising of flood level would thus appear to move in a vicious circle. When such conditions operate, the breaches of embankments may have serious consequences. The terrific velocity which a wall of water rushing down from a much higher level generates, sweeps away everything in its way and sometimes washes off entire villages.

Damodar-Bhagirathi interriverine plain: the embankments, high riparian strips and saucer shaped depressions

In the region bounded by the Damodar and the Bhagirathi, the slope is from west to east to the north of the Behula river. (Downstream, this river is first known as the Kunti Nadi, then Magra Khal and lastly Kana Nadi all of which are south-flowing.) South of the Behula river, the land slopes from north-northwest to south-southeast. A very prominent natural levee has formed downstream along the left bank of the Damodar which constitutes an important feature of the topography. The Damodar has a continuous line of high embankments on its left bank, 106 miles 1,114 feet (171 km.) long, of which 41 miles 3,494 feet (67 km.) are in the Hooghly district. It has also on its right bank six detached embankments of which 12 miles 4,250 feet (20.6 km.) are in the same district. The left embankment being continuous had been provided with many sluices to allow for irrigation and outflow of inland drainage. The Kana Nadi, the Kana Damodar and the Saraswati have zemindary embankments at various points. The high riparian strips of land (which are mostly natural levees locally known as *jāngāls*) are more or less occupied by village sites or by jute, autumn rice and vegetable cultivation. In between these strips are the depressions which turn into extensive rice fields, or, if still lower in elevation, form vast marshes. These depressions receive the drainage of surrounding lands and in the rains discharge their contents through small channels into larger streams. Such marshy tracts are especially numerous in the Chandernagore and Serampore subdivisions and are mostly found between the Hooghly and the Saraswati (e.g. the Dankuni marsh), between the Saraswati and the Kausiki as also between the Kausiki and the present and old channels of the Damodar. "Another peculiarity," writes O'Malley, "is that most of the smaller streams have more or less silted up and

have no visible outfall—a fact which accounts for the frequency with which the name *kānā* (one-eyed) is applied to them. Such silting up is particularly noticeable in the Hooghly subdivision above the Kānā Nadī."[32] In the western parts of the Hooghly, Chandernagore and Serampore subdivisions these narrow silted-up valleys, or rather the floodplain scour routes, fail to carry with sufficient rapidity the volume of water that pours into them in times of heavy rain and they consequently overflow. After the cessation of the monsoon these Kana Nadis are represented by a succession of stagnant pools in the deeper parts of their beds while the land, being undrained except by percolation, becomes waterlogged. Polba, Dhaniakhali and Pandua thanas furnish numerous instances of such shallow basins alternately containing lakes and swamps according to the seasons. After they have been drained, the swampy lands may become very fertile because of their high humus content. Another type of flood-plain lakes occurring in the Balagarh police station are the oxbow lakes of the Bhagirathi which are clearly discernible from their meander scars.

Chars

There are several *chars* in the north-eastern part of the district. These are bars which grew and are still growing on the inside of meander bends of the Bhagirathi by the slow addition of individual accretions accompanying migrations of the meander. These are roughly equivalent to what has been called a meander bar. As the bars extended themselves into meander curves a series of alternating arcuate ridges and sloughs marked the individual accretions. The sloughs became sealed off as sites of lakes or swamps leaving behind the *char* lands. Successive floods and deposits of silt or sand have gradually raised these *char* lands permanently above the flood-level. This process of alluvium and diluvium is most marked at the river bends and at the points of confluence with other streams. In the large bend of the Bhagirathi between Guptipara and Sukhsagar or at its confluence with the Kunti at Naya Sarai, numerous *chars* have thus been thrown up. Below Chinsura, however, such *chars* and large arcuate meandering curves are less in number and the western bank of the Bhagirathi is comparatively well raised in the form of a natural levee. In these parts an overflow of the river is accompanied by negligible momentum of the spreading waters causing concentrated deposition of fine-grained rock-waste along the immediate neighbourhood of the flooded channel which gradually decreases away from its banks. Such deposits, over the years, have taken the form of low but distinct riparian ridges which are termed in geomorphological literature as natural levees.

Human interference in the shape of embankments thrown across the natural gradients for building railways and roadways and for flood control has also changed the topography to a considerable extent. The Howrah-Sheakhala and the Howrah-Amta Light

Railways, for instance, are protected by high earthen bulwarks from the overflow of the Kausiki and the Kana Damodar. A number of important roads, e.g. the National Highways etc., run along elevated surfaces. Erratically constructed embankments, the immediate neighbourhoods of which are desolate (perhaps due to the flood menace), are to be found between Furfura and Jangipara below Nababpur to the west of the Howrah-Sheakhala Light Railway (*vide* S. O. I. topo-sheet No. 79B/2; 1929 edition); near the confluence of the Chaubis Bigha Khal and the Kata Khal as also between the Kana Damodar and the Bara Khal (*vide* S. O. I. topo-sheet No. 73N/14; 1954 edition); to the north of Kamarkundu railway station between the Kana and Ghia Nadi (*vide* S. O. I. topo-sheet No. 79B/1; 1942 edition) and across the Amodar river channels around Garh Mandaran (*vide* S. O. I. topo-sheet No. 73N/9; 1946 edition).

The Kana Nadi, the Kana Damodar, the Saraswati and the Rupnarayan (left bank) have zemindary embankments at various places. When the British took over the ceded districts, numerous man-made embankments were in existence in the Hooghly district, the most important being within the Burdwan Raj estate which owned those along the Damodar, the Dwarakeswar and the Silabati. The enormity of the number of these embankments will be apparent from the fact that as early as in 1835 they were classified into no less than nine different categories, namely (*i*) *Gānguriā* or river-embankments, (*ii*) *Surhad* or Pargana, i.e. boundary embankments, (*iii*) *Grāmbheri* or village boundary embankments, (*iv*) *Fari* or second embankments, (*v*) *Hassiah* or creek embankments, (*vi*) *Khāl* or cross embankments in creeks and *nullāhs*, (*vii*) *Jal-nikāsi* or drainage embankments, (*viii*) Masonry sluices and (*ix*) *Bols* or wooden sluices.[38] To these have been added in the 20th century a large number of railway and roadway embankments.

The uplands

The other major natural division of the district is the triangular portion west of the Dwarakeswar comprising the Goghat thana and having an area of about 146 sq. miles (378 sq. km.) which is a little less than one-eighth of the district area. Here there is a perceptible rise in elevation and surface undulations start from the Dwarakeswar westwards. The 50′ contour touches Hajipur, Harihar, Polba, Nakundu and Garh Mandaran, whereas the 100′ contour, further west, passes through Baburampur, Pandugram, Shyambazar, Fulai, Balabhadrapur (*vide* S.O.I. topo-sheet No. 73N/9; 1946 edition). At the westernmost corner of the district around Badanganj, the land is distinctly rocky being in fact a continuation of the Bankura terrain at a higher elevation. In these parts the general slope is from north-west to south-east and the country is drained by numerous non-perennial small torrents all debouching into the Dwarakeswar. They are mere trickles during the greater part of the year but have a rapid and unfordable current rising suddenly with monsoonal

rains and falling as abruptly. Their channels display scars of gully erosion and have sandy beds. The scenery, in contrast to the monotonous emerald plains further east, is quite impressive at Garh Mandaran and Badanganj with its red and gravelly undulations and patches of scrub jungle. On the whole, these uplands are less liable to floods than the country to the east. But the Sultanpur Bil, being situated at the confluence of the Tarajuli and the Amodar rivers, turns into a large lake during the rainy season inundating vast tracts of low land. The total length of the embankments of the Dwarakeswar, the dividing line between the uplands and the plains, is about 30¾ miles (49 5 km.).

Scenery: cultural and physical landscape

The metropolitan sphere of influence of Calcutta extends up to the trans-Damodar-Rupnarayan tract of the Hooghly district.[34] But the industrial, commercial and cultural influence is restricted to a long, narrow strip along the Bhagirathi from Uttarpara on the south to Bandel on the north and bounded on the west by the Howrah-Burdwan section of the Eastern Railway main line. To the west of this industrially advanced linear zone lies a rural expanse relatively unwatered, except for small pockets, by the rising tides of cultural and commercial change. The most notable case of such a pocket engulfing a rural scene has occurred in recent years at the Bandel thermal power station site. It seems that the changing land-use pattern has its maximum impact in areas where urbanization is accompanied by large scale industrialization. In the lower reaches of the Bhagirathi, below Tribeni, where factories started coming up long ago, each bend of the river seems to open up a fresh vista of modern mills and the impression of commercial and industrial activity which these convey is confirmed by the pattern of unplanned urban land-use, high density of population, congested lines of communication and vertical expansion of masonry constructions. Above Tribeni, the quieter village life predominates. The river bank is lined with temples and bathing ghats interspersed with thick groves and orchards, while the *chars* are clothed with splendid crops of tobacco, mustard or vegetables Unsophisticated village women move up and down the banks with water-jars, boats are moored alongside or ply on the river and the flowing waters produce lazy, caressing sounds. In the interior, the same scene is repeated on a minor key on all the larger waterways. In between the courses of the rivers stretch the unending plains producing autumn and winter rice and jute. Some of the thanas like Singur and Haripal are dotted with orchards of bananas, guavas, mangoes and lichis which are exported in large quantities to Calcutta and other consuming centres up-country. Occasionally, heavy monsoon rains convert the marshy areas into vast sheets of water when communication is kept up by boats or by means of paths over the embankments and the raised boundaries of rice fields.

In the uplands of the Goghat police station the scenery changes to a degree. The land becomes gradually undulating and is less liable to floods. The luxuriant groves and thick undergrowth give place to scrub jungle and clumps of larger trees; the depressions are fewer and the rice flats less common. The streams have sandy beds and a rapid course while the villages are more distantly situated and sparsely populated. Here the scenery grows more picturesque and furnishes a contrast to the somewhat monotonous landscape of the plains seen in the rest of the district.

River System and Water Resources

In more senses than one, the rivers of the Hooghly district provide a key to its geography, regional economy, socio-political pattern, cultural heritage and history. The entire district is a gift of these waterways, notably the Damodar group, though at present the Bhagirathi is more important,* especially as a splendid avenue of communication. At least in its lower reaches, it may be the busiest river in India and the mainstay of the river systems of south-west Bengal. We shall presently see how important has been the absence of a substantial divide between the Damodar and the Bhagirathi river systems in the construction of canals, development of rail and road communications and the general economic growth of this region. The Damodar group of rivers rises from the Khamarpat Hills of Chotanagpur plateau and enters the district from the west and north. Sudden and very high flood discharges, notorious destructive capacity, a dense dendritic network of numerous non-perennial tributaries and dry, shallow, wide river beds characterize this river system. Both the Damodar and the Bhagirathi groups are remarkable in another way, namely their tendency to take prodigious jumps by cutting through narrow necks of land for straightening and shortening their courses. This phenomenon, in the case of the Damodar, has often resulted in the abrupt dereliction of prosperous riparian settlements which form today an interesting ingredient of the social and cultural landscape of the district.

Since the Damodar and the Bhagirathi groups are both delta-building in nature,† it is necessary to divide the plains of Hooghly into hydrographical regions, before attempting a general description

* As in the past so at present, in deltaic Bengal the importance of a stream is always in proportion to the density of population crowding the river banks.

† Attempts have been made by various writers to classify the rivers of Bengal according to their hydrological characteristics. According to Major Hirst, the Damodar falls into the category of 'land denuding rivers'. S. C. Mazumdar terms the rivers which have their source in the Chotanagpur plateau and its continuation and debouch into the Bhagirathi as torrential rivers. In a paper which A. N. Mitra presented before the Institution of Engineers (India) in 1932, it was pointed out that each of these active delta-building rivers (as C. Addams Williams terms them) is flanked on either side by river channels into which it disposes of its flood-water by spilling across the country. Coming now to the Damodar, this active river has the Hooghly on one side and the Rupnarayan on the other to spill into. The Damodar and the Bhagirathi have, therefore, been described as deltaic rivers by many writers including William Willcocks.

RELIEF AND DRAINAGE MAP
HOOGHLY DISTRICT
SCALE
BURDWAN
MIDNAPORE
HOWRAH
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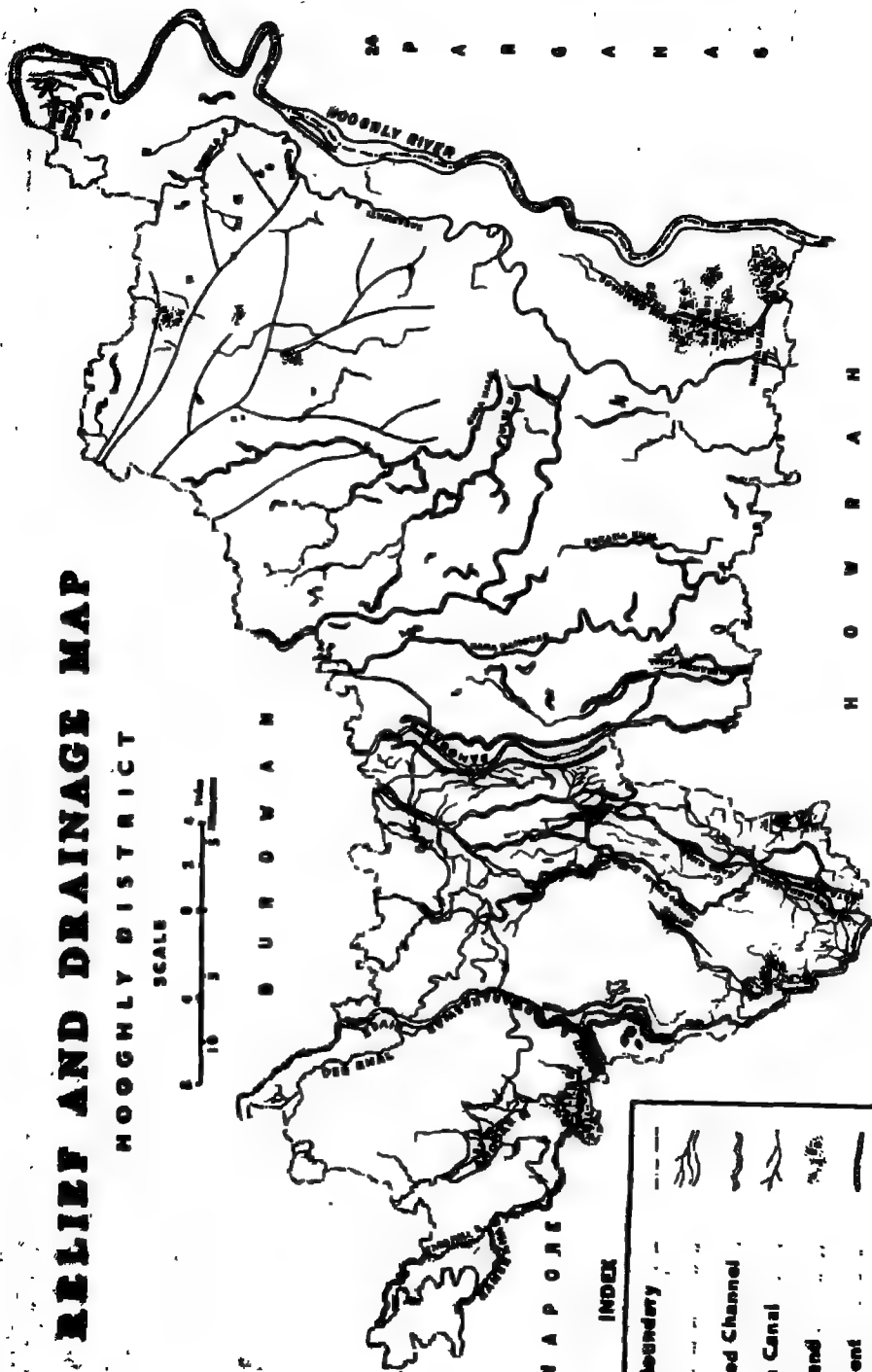
HOOGHLY RIVER
INDEX
District Boundary
River
Abandoned Channel
Irrigation Canal
Marshy Land
Embankment
Contour Line

of each of these river systems. Broadly speaking, these regions are four in number, namely the Ghia-Kunti basin north of Sheoraphuli-Tarakeswar railway line and the area south of the same railway line between the Damodar and the Hooghly encompassing almost the whole of Serampore subdivision and parts of Haripal and Singur thanas. Important rivers of these two areas are the Damodar, Saraswati or Kunti, Ghia, Kana Nadi or Kana Damodar, Kausiki, Behula, Kantul etc. The third region comprising the entire Pursura P.S. and the western parts of Dhaniakhali, Tarakeswar and Jangipara police stations is the Damodar basin proper and the fourth and the largest section consisting of almost the whole of the Arambagh subdivision (excepting Pursura) is known as the trans-Damodar area, which is drained by the Dwarakeswar, Rupnarayan, Raner Khal, Tarajuli, Kana Dwarakeswar and Mundeswari.

The main sources of information about the river systems of these regions are necessarily the early maps of Bengal and contemporary literature which, however, cannot vouchsafe for the accuracy of the relevant data inasmuch as the courses of both the Damodar and the Bhagirathi have been constantly changing.

The Bhagirathi

"The Hooghly river, or, as it should be more correctly described, the Bhagirathi branch of the Ganges, has three distinct sections, the upper section from the point of bifurcation to its confluence with the Jalangi at Nadia, the central section from Nadia to its confluence with the Rupnarayan at Hooghly Point, and the lower section from Hooghly Point to the sea. The central section is a little more than 120 miles long, of which 50 miles lie along the eastern boundary of Hooghly district. The river first touches the district opposite Santipur (in Nadia district—Ed.), below which it turns to the south-east past Guptipara, Balagarh, Jirat and Sukhsagar (in the Nadia district), forming several large *chars* as it swings from one side to the other. From Sukhsagar it runs south-west to Tribeni and then nearly south up to Hooghly town and Chinsura, after which it follows a southerly course, winding alternately from west to east, until Mahesh is touched. The river then flows nearly south up to the outfall of the Bally Khal, which is part of the southern boundary of Hooghly. The channel narrows from south to north, being in the winter months about three-quarters of a mile wide opposite Uttarpara, half that width at Hooghly and Bansberia, and a little less than half of it at Guptipara. ...In the summer the river shrinks much in breadth, and the height of water falls considerably. It is navigable by large boats and river steamers throughout the year; but in the hot weather navigation is precarious for river steamers in the northern reaches, as the depth of water falls to 6 feet, and the channel, winding rapidly from east to west through the *chars* and islands, is very tortuous."[35] The distance which the river traverses along the eastern boundary of the Hooghly district

from Kalna in the north to the Vivekananda Bridge at Bally in the south is 94.1 kilometres (51 nautical miles) or only 62.8 kilometres (about 39 miles) as the crow flies.

Mythical and historical association of the Bhagirathi river

The spiritual interpretations of physical facts given in the old texts may provide delightful reading but sometimes they are very fanciful indeed. For example, it is said that the Bhagirathi is not a natural river[36] but only an artificial canal excavated by Bhagiratha of legendary fame (hence the name Bhagirathi) in the days of the *Mahābhārata*. N. K. Bhattasali thinks that "the mouth of the Ganges had become silted up even in the days of Bhagiratha (approximately 2000 B.C.), and it is through the gigantic labours of that monarch that this course was given a fresh lease of life."[37] From what has been said in the next section on geology, it would be very clear that the Damodar and other Chotanagpur rivers used to flow into the epicontinental sea when the Bhagirathi, the main western branch of the Ganges, joined various sub-deltas of the Damodar and its branches and pushed the Gangetic delta towards the sea and thus intercepted the peninsular rivers. Moreover, the Bhagirathi itself has probably been pushed to the east by the detritus of the plateau streams.[38] The *Muktabeni* myth associated with the confluence of three rivers at Tribeni is again an exaggerated version of a strategic stronghold obviously found useful by the early Aryan colonizers. In a land of rivers like Bengal, any place where three rivers meet—and especially, if it is the head of an estuary—is apt to assume great strategic significance particularly to an ancient people to whom navigable streams were the best avenues of military transport.

There is nothing to prove that before the 15th century there was a sufficient fund of knowledge about the river geography of the Hooghly district. The scanty evidence of *Pavana-dutam*, the inscriptions of the time of the Sena kings and such other materials corroborate this conclusion. Judging from the condition of the deltaic portion of the Hooghly district, which has on its margins comparatively well-raised and settled land, it seems improbable that a heavily silt-laden main river has ever debouched for any considerable time in the recent geological period through more western parts of the district than the Saraswati plains.[39] Maybe that the pronounced meanderings of many of the rivers of Hooghly became a characteristic rather recently and succeeded the braided stream conditions which prevailed a few thousand years ago when excessive load rendered lateral erosion and meandering impossible.

So far as can be ascertained from early traditions (the existence of old beds, villages and towns with old histories on the banks of the river etc.), the main stream of the Bhagirathi, from the dawn of history, flowed due south down the course of the present river to about the vicinity of Tribeni, a name signifying the junction of

three streams and mentioned by Ptolemy in A.D. 140 and Pliny in 166. The superior sanctity of the Jāhnavi (Bhagirathi) is sung in many Sanskrit texts and is recognized up to the present time.[40] At Tribeni the Saraswati branched off south-westward from the main Bhagirathi channel and, according to Sherwill, even as late as in 1857, a former branch of the Saraswati could be traced from Chanditala past Amta into the Damodar and the Rupnarayan and so through the lower Bhagirathi to the sea. Rennell also has referred to this old course of the Saraswati which, according to Van den Broucke's map of 1660, appears to have left this channel to join the Bhagirathi at Sankrail, a couple of miles below Betor in the present Howrah district The Bhagirathi channel below Hooghly Point (on the right angular bend of the river opposite its confluence with the Rupnarayan) gives the appearance of being really a continuation of the Rupnarayan and was probably formed at a very early age by the main branch of the Bhagirathi which is presumed at one time to have flowed past Tamluk. The Bhagirathi above Hooghly Point would probably then have been either a smaller branch or a tributary. An alternative and more probable suggestion is that at Tribeni, the Bhagirathi divided into three streams: (1) the Jamuna flowing south-eastward (2) the Saraswati flowing south-westward past Saptagram with one branch debouching into the Bhagirathi at Sankrail and the main branch running past Amta into the Damodar and probably also the Rupnarayan and so into the lower Bhagirathi and (3) a middle branch which was the Bhagirathi proper flowing south along the present Bhagirathi channel.[41]

From what has been said by O'Malley, it is clear that in its upper reaches, i.e. above Hooghly, the Bhagirathi has an unstable course meandering through a wide strip of land but below Hooghly it becomes fixed and the channel is confined between permanent banks. Very close to the point where this change of regimen occurs, the Magra Khal (also known as the Behula river, the Kunti Nadi and the Kana Nadi), an old channel or branch of the Damodar river enters the Bhagirathi at Naya Sarai and only two miles downstream at Tribeni the old bed of the Saraswati river can still be seen. These two channels are now dead, the Bhagirathi water backing into them during the rains or at high tides and pouring out again as the level falls.

Nature of the bed of the Bhagirathi and periodical changes in its course; profiles, volume of water and seasonal variations; tidal action and physical history etc.

There is almost a complete absence of information regarding the section of the Bhagirathi between Guptipara and Hooghly. However, the curious relative flattening of the slope between Kalna and Dumurdaha and the abnormal increase of declivity between Dumurdaha and Chinsura has given rise to an interesting controversy. It is conjectured that this hump may be due to a local seismic upheaval but this surmise is not supported by any conclusive evidence. A more satisfactory explanation is that in the portion between Guptipara and Balagarh, which is the tidal head of the

Bhagirathi during the freshet season, the downcoming current surcharged with silt meets the tidal current which checks the velocity of the former causing deposit of silt that has raised the river bed at this point. The same action was probably accentuated by the retarding effect of the Damodar current when the Naya Sarai channel was open. In the first quarter of the present century, this rising hump caused grave concern. "If unimpeded and progressive, it might eventually force the Upper Hooghly eastward and probably into the Ichhamati channel and the anticipated entry of the Damodar at Kalna, if not prevented, may even now cause the diversion catastrophically. This brings us to a point on which . . . great stress is continually laid and that is the crucial question of improving the tidal flow of the Hooghly. The improvement of the tidal flow connotes an improvement of the upper channels, an improvement which can only be naturally maintained for any time by this means. An improved channel will move the 'tidal head' higher up the river and so relieve the situation and it will also minimize overflow. If with the entry of the Damodar, its water can be kept in the present Hooghly course, this should effect a natural improvement of the channel through this raised section. This section, therefore, though far above the navigable Hooghly, is of the utmost importance in the maintenance and improvement of the channels of the latter and should have a prominent place in any general scheme of Hooghly river improvement."[48]

During the height of the freshet season, tidal influence ceases above Guptipara owing to the raised level of the river, but the limit varies naturally with height of the freshets and the strength of the tides. The freshet season lasts from July to September when such a huge volume of water is brought down that no tide is felt and the current is then known as *ekṭānā* or one-sided. In the dry season the upward tidal movement and the tidal rise and fall are felt distinctly throughout this portion of the Bhagirathi. The high water of the spring tides reaches Chinsura between three and four in the afternoon. Its velocity, which at Calcutta is 18 miles an hour, diminishes as it advances northward.*

* Table of '*Approximate* Corrections' to be applied to the predicted times at Garden Reach to find the times of High and Low Water at the following places on the Bhagirathi, and their distances in nautical miles from Fort Point, Calcutta. (*vide* Tide Tables for the Hooghly River, 1965. p. 72).

Name of Place	Nautical miles from Fort Point, Calcutta	Correction for			
		High Water		Low Water	
		Hrs.	Mins.	Hrs.	Mins.
Konnagar (Port Boundary)	9	add 0	48	add 0	50
Palta Water-works	15.5	add 1	00	add 1	15
Chandernagore	22	add 1	15	add 1	40
Jubilee Bridge, Hooghly	25.8	add 1	30	add 1	50
Tribeni Tidal Observatory	32	add 2	42	add 2	58

"The difference between low and high water* is 7 to 8 feet at Chinsura, the difference between neap and spring tides being 3 to 4 feet. Further up, the rise becomes smaller and smaller. Bores occur in the hot months (March to May) at perigee† springs, with more or less violence, according as tidal conditions are favourable or not and the southerly breezes are strong or feeble. The bore diminishes in force in its passage up from Calcutta, and at its highest may be 2 feet high at Chinsura."[43]

There is quite a number of bars which form on the inside of meanders and extend into the meander curves. One is just below Guptipara and over this, at the peak of ordinary spring tides in the dry season, some 7′6″ (2·29 m.) of water is available. Similar shallow delta bars formed by tributaries, one at the crossing above Bhaira and 2 below Balagarh above the confluence of the Churni, afford 9′ to 9½′ (2·24 to 2·90 m.) depth at high-water spring tides. "In the remaining portions of the channel the depths are ample and, in the bends, depths from 30 to over 40 feet are obtainable, and in one place at the Kaliganj loop (between Jirat and Dumurdaha—Ed.) where erosion is active the bed has scoured down to nearly 70 feet. This loop has narrowed considerably and worked downstream bodily for about 1½ miles since 1855. Fergusson, in 1863, referred to the erosion which was then taking place as indication of the activity of the Matabhanga, which he thought threatened to cut a new channel for the Upper Hooghly to the eastward of Calcutta, but was prevented from doing so by the Eastern Bengal Railway embankment."[44] The excavation of an artificial canal through the neck of this loop was thought of in 1919. "As it is in the tidal area the 'cut off' may, on the whole, be beneficial by assisting the tidal flow in the Upper Hooghly and at the same time it will prevent the loop working down into the old Jabuna channel."[45] In the section between Hooghly and Calcutta, where the regime is fixed, the first and most serious bar is opposite Chinsura. At high-water in neap tides during the dry season, the available depth here is barely 6 feet (1·83 m.), while at high-water in ordinary spring tides, it is about 14 feet (4·27 m.). There are two 13 feet (3·96 m.) bars at the crossings at Ichhapur and at Barrackpur, otherwise the

* The following information supplied by the River Surveyor about the relationship between high and low tides at Garden Reach may be found useful by navigators: "The time of high water is that at which the tide reaches its highest altitude although the current at Garden Reach will continue to run up for about an hour, except during July to September when the current will cease to run up at about the time of high water. During neap tides in September there may be no flood current at all. The time of low water is that at which the tide reaches its greatest depression although the current at Garden Reach will continue to run down for a little more than an hour except during spring tides when, as the range increases, the interval between low water and the appearance of the flood current decreases." (*vide* Time Tables for Hooghly River, 1965. pp. 7-8)

† The sun and the moon are said to be in perigee when they are at their least distances from the earth. The amplitude of spring tides at perigee is naturally higher due to greater intensity of centripetal and centrifugal forces producing the tides.

depth in the channel is greater than 18 feet (5·49 m.). "The Ichhapur bar appears below a sharp bend after which the river widens, and where the crossing is not well defined; and the Barrackpur bar practically reproduces the conditions of the Moyapur bar in the lower Hooghly. In this case, the river at the lower end of the reach widens considerably and the right bank below Serampur trends away, so that the ebb stream loses its guiding control across to the opposite bank. In spite of those two obstructions, the river channel generally from Calcutta up to Chinsura is actually in good condition."[46]

There appears to be a general misconception that because ocean-going vessels do not ply above Calcutta, the river is incapable of carrying them above the port. This wrong impression is further strengthened by the fact that there has been an almost continuous southward migration of towns with riverine economy and a simultaneous decay of the upper reaches of the Bhagirathi. But that does not necessarily mean a general decay of the river itself, at least in its lower section. The southward shift of riverside towns merely indicates a better choice of location for an urban habitat. As a matter of fact, the channel from Howrah bridge to just below Barrackpur offers no serious obstruction to deep-sea traffic and the largest vessels visiting Calcutta could, so far as depth is concerned, proceed up to Barrackpur with even less difficulty than is experienced in the passage up to Calcutta. Above Barrackpur even during the dry season, vessels, of about 20′ (6·1 m.) draft could navigate as far as Chinsura at high water ordinary spring tides and the Barrackpur and Ichhapur bars, which are the only serious obstructions, would probably yield more readily than the Moyapur bar to dredging, so that with proper treatment, if necessary, the channel could be deepened.[47]

Looking at this issue from a historical perspective we find that the silting up of the Saraswati about the 16th century caused much more water to flow along the Bhagirathi channel, which, normally, should have invigorated it. Prior to that time, the Bhagirathi was unlikely to be the most important navigable river in this region. According to Radha Kamal Mukherji: "Van den Broucke's map showed the Dwarakeswar, a branch of the Damodar river, as joining the Rupnarain, called the Ganga by some foreigners, at Nursipour, and proceeding to the sea. Rennell's map also shows that the Damodar sent one of its branches to the Bhagirathi above Tribeni and another branch joined the Saraswati at Nursipour. It appears from recent surveys that one of the main lines of entry into Bengal in the past was up the Rasulpur river, thence by a channel connecting it with the present Haldi river, and across by a branch of the Rupnarain, which flowed direct into the river. From the Rupnarain there was another channel going direct into the Hughli some distance above Calcutta. It is clear from the maps of the 18th century that the

Rupnarain was more important formerly than now, and that it had two channels, one the existing channel into the Hughli, and the other which branched off below Tamluk, into the Haldi. . . . Even in the 15th and 16th centuries large vessels sailed up the Saraswati. Merchants from various parts of India, as Kalinga, Trailanga, Gujrat etc., used to come to Saptagram for trade, and it was from here that muslins, spices and other goods were exported. In 1585 Ralph Fitch found Saptagram 'a faire citie for a citie of the Moores, and very plentiful of all things.' But within the next two decades this city was to perish.

"When Rennell drew this map (1764), the Saraswati was 'a small creek', being only 7 ft. 6 in. deep at high water near its exit from the Bhagirathi. His assumption that Saraswati once passed through the site of Bellya morass to Ompth (Amta) on the Damodar and then crossed to the Rupnarain to march to the sea is unacceptable. The old course of the Saraswati, through which the Ganges waters flowed after the Bhairab course lost its importance, probably in the 12th century, seems to be that by Syannegger (Shahnagar), Chaumaha, Bejjeh Sundari, Amgachi and the Bellya morass, whence it took an easterly course to return to the Bhagirathi at Betadda or Bator. This is the course of the Saraswati, as charted by De Barros and Van den Broucke. After Bator the Saraswati occupied what is now the old bed of the Bhagirathi to flow seaward through Pichalda."[48]

In the *Manasāmangal* of Bipradas (written around A.D. 1495) and in the *Chandimangal* of Mukundaram (A.D. 1533-1600) it is seen that merchants avoided the Saraswati course to Hijli and followed the Adi Ganga (Bhagirathi). "It was not because it was too shallow, but because it was too deep, so deep as to be readily accessible to the galliasses of the Arracanese pirates, whom the voyagers were most anxious to escape."[49] Ceasar Frederici's account also reveals that at Bator (literally meaning shoreless), where the combined waters of the Saraswati and the Damodar entered the Ganges and formed a delta, Portuguese ships used to anchor during the 16th century and only small vessels could sail up to Saptagram.[50] In Van den Broucke's map. the mouths of the Saraswati, Rupnarayan and Adi Ganga were not only shown separately but the Damodar-Saraswati delta had also disappeared.[51] Very interestingly, this improvement in the Bhagirathi channel coincided with the decline of Portuguese piracy, trade and commerce and the simultaneous growth of trade and settlements of other European nations In 1620 Hughes and Parker wrote from Patna, where they were sent from Surat in order to found a factory: "This city (Hooghly or Gollye) stands up on the Ganges, whose swift current transports their (Portuguese) frigates with such dexterity that in five or six days they usually go up to their ports."[52] By 1757 the Bhagirathi channel had improved so much that under Admiral Watson, three or four 64 and 66-gun

British men-of-war sailed up the river and captured the French fort at Chandernagore. By the end of the 18th century many European trading settlements dotted the banks of the Bhagirathi, namely Farashdanga, Saidabad, Jungipur, Ghiretty, Bandel, Hooghly, Chinsura, Chandernagore and Serampore. By the first half of the 19th century numerous industrial establishments grew along the river outclassing the commercial centres of the previous century, namely Kassimbazar, Dacca, Luckipore (in Noakhali district), Patna, Malda, Rajmahal and Balasore[53] A comparison of the rivers and riverine marts and towns of Bengal as indicated in the maps of Van den Broucke (1658-1664) and Rennell (1764-1776) throws a flood of light on the changes in the riverine economy of Bengal.

Van den Broucke's Map, 1658-1664	Rennell's Map, 1764-1776
1. The Ganges forms big island with "Caatgam" (Saptagram) on the north, and Calcutta on the south. The main land to the west of the island is thickly dotted with river ports and marts. Both the streams (encircling the island) are navigable. The western stream is probably the Saraswati and the eastern the Bhagirathi.	The island is no more visible. The Saraswati hardly appears. Saptagram is not mentioned. The only towns indicated are Purrua, Sirrinagar, Hughley and Chandernagore.
2. Two streams fall into the Bhagirathi—one from the west, the Damodar and another from the east, the Jelinghi south of Nadia at Ambowa (also mentioned by Rennell); but nowhere three streams meet, even at Tribeni.	The two streams are no longer prominent on the map at Ambowa point; the three streams off Tribeni are not visible.
3. Four western rivers in a series are shown, all fairly broad and navigable and debouching into the Bhagirathi: (1) the Ajai river (2) the Damodar, one branch of which (probably the ancient channel of the Banka) meets the Bhagirathi at Ambowa and the other diverging near Jehanabad and passing through Khanakul meets the Rupnarain (3) the Rupnarain proceeds due east from Naraingar into the Ganges as the "Patragatta" river on which stands the important town of Tamluk.	The Ajai has lost its importance by the time of Rennell. She meets the Bhagirathi at Katwa. A small river, the Banka, takes its rise from the Damodar near "Soonamooky", goes eastward and falls into the Ganges near Kishenagur (Krishnagar). The Damodar now turns perpendicularly southward from Burdwan to the Bay. Its other branch Behula falls into the Bhagirathi but the main stream flows south and not east. Narangur (Naraingar) is still shown on the river Rupnarain. The Rupnarain now falls into the Hooghly estuary where the Damodar and the Bhagirathi also debouch. Both the Huldi and Rasoolpur Channels, once the chief entries to the delta, have now dwindled into insignificance.
4. The Bhagirathi is much broader on the map, expanding since the decay of the Saraswati. But there is no mentionable settlement on its right bank except Tribeni.	The Bhagirathi appears to have become again an unimportant branch of the Ganges as it is today.

"Rennell found in 1771 that the Bhagirathi as well as the other Nadia rivers were not navigable all the year round. In 1801 Colebrooke stated that the Gorai and Chandni were the only channels in the western portion of the Ganges delta which were navigable throughout the dry season, and that the Bhagirathi and Jelanghi could not be relied upon. It will thus appear that so far as the Bhagirathi is concerned she had a relatively brief spell of activity as a river. The depth of the Saraswati and the extinction of Saptagram may be fixed at 1600 A.D. by which date the Bhagirathi superseded the Saraswati. . . At least from the middle of the 17th century sea-going vessels found it difficult to negotiate the 'shelves and sands' of the Hooghly (Bhagirathi) estuary."[54] De Grandpre, who sailed along the Bhagirathi, wrote in 1803: "When the French company was first established in the country (Bengal), ships of war of seventy-four guns came to Chandernagore, but afterwards they were obliged to stop at Mayapoor, and at present can reach no further than Cadgery, a small village at the mouth of the river."[55] Forster, who travelled in Bengal in the years 1783-1784, however, wrote: "The Ganges (Bhagirathi) affords a grand aid to the English, in all military operations within their own territory."[56] This latter view seems to be more in keeping with the history of the river at least in its lower reaches.

From the general characteristics discussed in the preceding pages, it appears that the Bhagirathi is by no means a decaying river. In 1853, when the Hooghly Commission was considering the abandonment of the river, the largest vessel visiting the port of Calcutta was of 1,810 tons. The maximum tonnage thereafter increased rapidly to 2,163 in 1860, 4,023 in 1880, 7,237 in 1900, 8,117 in 1911 and 12,989 in 1917. This trend climaxed in 1966 when a Russian super oil-tanker entered the Bhagirathi channel.* In 1870, no vessel of over 24′ (7·32 m.) draft could come up to Calcutta but vessels with 35′ (10·66 m.) draft are now undertaking the journey. It must, however, be added that this improvement is not wholly due to natural causes; it is partly the result of technological progress in river control. Even so, there is hardly any evidence pointing to a perpetual deterioration of the entire river. The declining phases are confined only to certain sections of it due to chaotic causes like a succession of low and high freshets. After a careful consideration of all connected issues, Stevenson-Moore and his associates came to the following findings:[57]

"The bar at Bansberia is of approximately the same depth now as formerly. The shoal at Chinsura has deteriorated from 10 or 12 feet to 3 feet, but this is probably only due to local causes and cannot be taken to indicate a general deterioration. The bars at Ichhapur

* Owing to short bends in the river, ships exceeding 540′ (170·59 m.) in length cannot enter the port. This limitation can be overcome only if straight channels are cut through the meanders like those on the Rhine in southern Germany.

and Barrackpur may have deteriorated, but very slightly, while the channel lower down at Barnagur has improved. As a matter of fact, the conditions in the upper section of the Hooghly cannot be said to have altered materially in the past 160 years. ... In recent times, two surveys have been made, one in 1884-85, in which the soundings of the river were taken up to Shamnagar, and another 24 years subsequently in 1909, when the river was completely surveyed as far as Bansberia. ...From the figures, the cubical contents of the river at high-water (18 feet) and at datum (lowest low-water) have been calculated with the following results:

Year	Cubical contents at low-water (datum)	Cubical contents at high-water, 18 feet rise
1885	1,900,170,000 c.ft.	4,365,720,000 c.ft.
1909	1,903,430,000 ,,	4,372,770,000 ,,

It will be seen that the change is practically inappreciable, being slightly greater in the latter year. ...

"An examination of the curves will show how considerably individual cross sections vary in the course of even three or four months in the dry season; this, of course, is to be expected with the changing tidal conditions as the cross sections most favourably situated with regard to the flood and ebb currents, naturally oscillate in area as the one or the other tide predominates, so that one part of the river fills while another part scours alternately in different seasons. ... The foregoing comparisons of the cubical capacities and longitudinal sections indicate that at least there had been no progressive deterioration of the upper section of the Hooghly between 1875 and 1909 and probably an improvement. Reclamation works and encroachment on the channels have, however, been in progress, and the effects of some of these works will probably be deleterious and will now begin to be increasingly manifest.

"Since 1885 there have been considerable changes opposite Chinsura, but these have been largely due to the effect of the Jubilee Bridge. Owing to accretion on the left bank below the bridge, the Gouripur Mills have been compelled to extend their jetties considerably and have consolidated a great portion of the inner ends. ...About this site the river changes its character from an unstable to a fixed regimen and it is possible that the movement of the channel close to the right bank was due as much to alteration in the river above, as to the effect of the bridge. ...

"Between Chinsura and Cossipur the natural tendency is for erosion to take place along the bights. As the banks are hard and fairly well consolidated the rate of erosion is generally very small being about 2 to 3 feet a year and slightly greater opposite Barrackpur and the Park where the high-water line has cut away about 100 feet since 1885. ...

"Cases of artificial reclamation are very frequent in this section of the river. Below Chinsura, the left bank from the Anglo-India Jute Mill has been built out till the point opposite Chandernagore had in 1909 been thrust out as much as 250 feet beyond the high line of 1885 and the jetties of the Alliance and Alexandra Jute Mills jut out over 200 feet further into the river. This is at a place where the river is already very narrow, being now only 1,400 feet wide and the reclamation which continues down to the Auckland Jute Mills accentuates the bend. The effect on the opposite side is shown by a cutting away of the right bank to the extent about 200 feet about midway between Chinsura and Chandernagore, but below this and right opposite the point, a new mill has been erected. This has consolidated the bank along *chur* land which the river formerly overflowed and has further restricted the channel. . . .

"From Champdany Point to Baidyabati, the right bank has been raised and consolidated for brick-fields, but for the most part, the river here is wide. At the lower end, where it narrows at Palta Point, the accretion mentioned before has caused restriction. Below Serampur, from the Howrah Water-works at the point to the Wellington Jute Mill, there has been considerable reclamation for an average width of 300 feet in a mile of foreshore. The accretion at the point at Mahesh opposite to Kharda has been as much as 400 feet between 1885 and 1909 and the river here is now just over 1,500 feet wide: the Wellington Jute Mill jetty here has been extended about 150 feet. ...Below Kutrang Point, there has been considerable reclamation for brick-fields and this has carried the high line in the middle as much as 500 feet.

"The greatest reclamation has, however, taken place at Calcutta itself. . . .A great deal of this reclamation is quite recent and has reduced the throat of the river at its narrowest part at the Howrah Bridge. On the right bank, land has been reclaimed on the Howrah side to about half the width of the river in 1793.

"It is recognised that the erection of mills and works on the river bank is a necessary concomitant of the industrial expansion which fosters the trade of the port, but wise and far-seeing control is needed to preserve the necessary balance between the interests of the conservancy of the river and those of local industries which are mutually interdependent. As a matter of fact, the erection of mills along the river bank is in most cases far from being prejudicial to the river. On cutting banks, walls are usually built to protect the foreshore and this fixation of the banks where natural erosion is active prevents undue widening and helps to preserve the general regimen. However, in many cases, mills are built at points or on the convex banks. Under these circumstances, the depths at the jetties are naturally shallow at the worst season and the tendency is to extend the jetties and consolidate the inner ends and low-lying land inshore. These

then form natural obstructions to the flow of the flood-tide, accentuate the bends and cause accretion along the bank, where areas over which the tides spilled at high-water are reclaimed. . . .In such a river as the Hooghly which depends for eight months in the twelve on the tidal action to keep the lower channels open, interference with the flow of the flood-tide reduces the force of the tide wave above the obstruction. The downward swing of the ebb tide is consequently diminished and the river bed may, therefore, fail to react to the reduced width and the restriction in cross sectional area would become permanent and the tidal reservoir reduced.

"The resulting restriction of the tidal influence in the upper reaches would have a generally harmful effect on the whole regimen of the river and consequently all works which tend to obstruct the tide-wave have to be carefully considered in their general, apart from their local effects. For instance, a bridge such as that contemplated for the East Indian and Bengal Nagpur Railways at Bally-Uttarpara may apparently provide sufficient waterway for the ordinary discharge, but the number of piers in the river bed may, by opposing the natural movement of the tide, considered as a wave and not as current, reduce tidal action above it with harmful consequences to the general regimen."

The Damodar

The next large river of the district is the Damodar, which, in some respects, is even more important than the Bhagirathi. It enters the district from the north between the Shahpur and Habibpur villages and flows south in a meandering course separating the Arambagh subdivision from the rest of the district. From a point above Rajbalhat it forms for about 8 miles (12·9 km.) the boundary between Hooghly and Howrah before entering the latter district. Including this boundary strip, the total length of the river within the district is about 28 miles (45 km.).

In its upper reaches the Damodar flows with a swift current bringing down vast quantities of silt from the Chotanagpur plateau. It leaves the Hazaribagh district at an altitude of only 582 feet (177·4 m.) above sea-level and has a length of over 250 miles (403 km.) between this point and its confluence with the Bhagirathi. In its lower stretches, it assumes a deltaic character throwing off distributaries instead of receiving affluents. Formerly its flood discharge passing along these branches as well as down its main channel watered a large part of Hooghly and Howrah but most of these outlets have now been more or less silted up, while the Damodar itself is restrained on the east by a long, high embankment. This has resulted in its ravages being confined in recent years to a limited tract on the west, albeit with more intensity. Previously, after heavy rainfall, it often threatened to overtop or breach the embankment causing no little alarm in the villages lying on its left bank. Not only is it justly dreaded for its destructive floods, but it is also notorious for the frequency with which it changes its course.

The Damodar has a sandy bed averaging half-a-mile in width. It is fordable at many places in the hot and the cold seasons and is then not navigable by boats. In the rains it is fordable nowhere and becomes navigable by country boats. Since the formation of a breach in the western bank at Begua in the Burdwan district, a large volume of its water has been diverted to the Mundeswari through a new channel known as the Besia Khal, resulting in considerable shrinkage of the main course. There are no islands in its bed but several sandy grass-covered *chars* are to be seen opposite the meander bends some of which are under cultivation. The banks are well-defined and vary from 10 to 15 feet (3·04 m. to 4·57 m.) in height. Cultivation often extends up to their margin, but on the west, as far as the Besia Khal, the land is largely covered with sand or otherwise rendered uncultivable for a width of about 2 miles (3·62 km.). When silt is deposited after floods and the water can be easily drained off, rich *rabi* crops are raised on such soil.

Spill channels of the Damodar

The discharge brought down by the present Damodar river diminishes by more than half from its bend at Salalpur (above Krishnapur in the Burdwan district) where the surplus flood water partly gets spilled over the country forming *hānās*, i.e. breaches in the bank or embankment of a river, and is partly discharged through other channels such as the Banka, the Kana Nadi, the Kana Damodar and the Madaria Khal on the left and the Mundeswari and the Kana Dwarakeswar on the right. In 1865 a great flood burst through the right bank of the Damodar at Begua or Bego in the Burdwan district and eventually joined the Mundeswari, till then a passive drainage channel of minor importance.* The Mundeswari, carrying now a much larger volume of water, joined the Kana Dwarakeswar (which is also known as the Kana Nadi) and instead of flowing eastward into the Damodar Khal forced its way into the Rupnarayan opposite Ranichak carrying a large influx of water in the flood season. As a result, the main channel of the Damodar below Begua has shrunk perceptibly. The spill carries all the top water of the Damodar into the Mundeswari while the bottom water, with a full complement of coarse sand, moves along the lower Damodar.

There was a number of spill channels to the east which were blocked off by the left embankment. Their old courses are still visible and some of them function even now as drainage channels during the monsoon. One of these is the Gangur or Behula which rises in the Burdwan district and bifurcates into two streams near Baidyapur in the Kalna subdivision of the Burdwan district. The northern branch, traversing a circuitous route, meets the Bhagirathi near Somra while the other branch flows in a south-easterly course across

* As has already been said, a passive drainage river such as the Mundeswari is meant by nature to carry the spill of more active rivers.

the district and falls into the Magra Khal half a mile (804 m.) west of Naya Sarai. Another channel of this nature is the Kana Nadi which branches off from the Damodar near Jamalpur in Burdwan district and falls into the Bhagirathi near Naya Sarai, 3 miles (4·83 km.) above Tribeni. The total length of the stream is about 50 miles (80·5 km.) of which 44 miles (70·84 km.) are within the Hooghly district. The upper reach, up to Gopalnagar, is known as the Kana Nadi which is annually flushed from the Eden Canal, the central part is called the Kunti Nadi and the lower portion as the Magra Khal. The channel retains some flow of water all the year round. After a study of old maps, O'Malley came to the conclusion that by Rennell's time this branch of the Damodar had decayed and that the process of its siltation was accelerated by the course it was forced to take, its easterly flow being barred by the high banks of the Saraswati.[58]

In a chart prepared in 1701 the Kana Damodar is marked as a river for large ships, but by Rennell's time it had ceased to be a big river. Its mouth has since been silted up but its former importance is indicated by the extensive marshes on both sides and by the populous villages dotting its banks. In Jao de Barros and Blaev's maps this stream appears with two mouths and some large islands. The lower mouth is that of the present main channel of the Damodar falling into the Bhagirathi opposite Falta Reach and the upper mouth may be identified with that of the Kana Damodar joining the same river at Sijberia, a mile above Uluberia. In the maps and accounts of the second half of the 17th and the beginning of the 18th century, the lower course is named Raspas (Rasphyus) of Mandalghat—the former being a Dutch and the latter an Indian name while the other course is shown as a broader river with small islands at its mouth and called the Jan Perdo or John Perdo, the *Danei Budha* of the palm-leaf chronicles of the Jagannath temple of Puri.[59]

The Khari, the Banka and the Brahmani are also now deprived of spills due to the Damodar left bank embankments. Van den Broucke's map (1660) depicts the Banka as a big stream carrying a large volume of the Damodar water. M. Peron's map (1780) of inland navigation represents it as a navigable river for the best part of the year. But a recent field survey (1956) describes the Banka as a trifling stream[60] with a dry sandy bed in its upper reaches. The life cycle of these "beheaded streams"[61] has been greatly disturbed by the construction of Damodar embankments. Some writers believe that "certain amount of entrenching of the river beds of the Khari and Banka to the east of Burdwan points towards the possible proof of elevation of this area. Moreover, the existence of terraces of the riversides, especially in the Khari, leads to the same conclusion."*

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* These lines are quoted from a paper by Shri S. P. Das Gupta published in the *Geographical Review of India*, 15. No. 2. The writer is of the opinion that the

William Wilcocks, however, had a very different opinion about these spill channels, 'beheaded streams' and 'blind' rivers. "Thus in the Damodar area we have a number of channels which are called 'Kana Nuddee', while in Hooghly we have three separate 'Kana Damodar', 'Kunti Nuddee' and 'Kintool Nuddee', all old artificial works."[62] He was convinced that these were excavated for irrigational purposes—a view which does not seem to be tenable.

Changes in the course of the Damodar

It has already been stated that ages ago the Damodar used to flow directly into an epicontinental sea—an extension of the Bay of Bengal. As the Gangetic delta formed, the main western branch of the Ganges, namely the Bhagirathi, intercepted the Damodar group of rivers which were forced to form subsidiary deltas higher up their courses. The Damodar has now no sea-face though its outfall rivers, the Bhagirathi and the Rupnarayan, are subject to tides. Its deltaic action is not dependent on the tides but starts much higher up at places where it can no longer carry the excess charge of sand that it brings down from the hills, and so drops it on the bed. This reduces the depth and width of the river valley forcing the stream to break its banks and debouch on to the plains through myriads of spill channels (laden with fresh silt and sand) and *hānās* giving rise to deltaic formation For example, the most moribund deltaic tract of the Damodar, i.e. the Banka-Behula-Gangur-Ghia basin of the north-east has now no connexion with the parent river, though in the past these spill channels used to carry a large portion of the main current. The eastern and south-eastern parts of this delta is characterized by old, dying, weed-choked and meandering streams—the land of the 'kana' rivers. Along the Damodar channel itself, especially to its west, is the land of the *hānās* which fall into the Deb Khal network which traverses a shallow depression, running parallel to the main river to its south and west, and overgrown with *benā* grass. Today the Damodar delta is a land of seven 'kana' rivers and the villagers laconically remark that their land is infested by blind, choked and dying rivers (*kānā*, *bojā* and *majā*).[63]

A study of subsoil geology reveals that there are no continuous layers of sand, silt or clay of recent geological age present in the inland delta and that the detritus brought down by the Damodar and the Bhagirathi are intermixed at all places as is proved from the infiltration of clay-pans of varying thickness in the beds of sand or silt. This establishes that the Bhagirathi, the Damodar and their spill channels have been shifting their courses and in the process of such migrations have formed the inland delta.[64]

The early maps of Ptolemy (A.D. 140), Jao De Barros (1550), Gastaldi (1561), Hondivs (1614), Mercator (1620), Blaev (1645),

entrenching river-beds of the Khari and the Banka to the east of Burdwan are probably due to tectonic disturbances, a view which cannot be supported unless adequate facts about the tectonic disturbances and the details of the structural geology of the region concerned are known.

Van den Broucke (1660), Cantelli Da Vignolla (1683), Herman Moll (1710), G. Delisle (1720-40), F. De Witt (1726), Izzak Tirion (1730), de L'Auville (1752) and Thornton and some sketch maps by other cartographers provide us with an idea of the relief and hydrology of the Damodar valley. It is very difficult to determine the authenticity of some of these maps, because cartography was not so well developed then as it is today. Secondly, these surveys were probably visual rather than instrumental. Depending on such insufficient and inaccurate data, the past behaviour of the river cannot be correctly ascertained. Taking Rennell's presentation as the base map, we may compare the courses of the Damodar as shown in the earlier and later maps for a historical study of the migrations of the river over the past centuries. In Gastaldi's map of Asia and Hondivs's map of the East Indies the Damodar was not mentioned but *Sātigān* (Saptagram) was shown located at the mouth of a peninsular river. Van den Broucke's map depicts the Chotanagpur rivers like the Ajai, the Damodar, the Rupnarayan, the Subarnarekha, the Burabalang and the Baitarani, spaced more or less parallel to one another and the Damodar and the Rupnarayan linked by the channel of the Dhalkisore or the 'Kana Nudi'. Maps of Izzak Tirion and G. Delisle show that the Damodar and the Rupnarayan flowed from west to east and debouched into the Bhagirathi. The map of Bengal drawn by de L'Auville shows that the Damodar had then a south-easterly course but from Silimabad it flowed in a north-easterly direction finally falling into the 'Ugli', i.e. the Bhagirathi at 'Nudia'. The Damodar and the Tombali (Rupnarayan) rivers were joined by a channel which was obviously the Dhalkisore of Van den Broucke.

A study of the rivers of Bengal as they were during the 16th and the 17th centuries shows that the Damodar took a bend at right angles near Jehanabad and that another branch of it flowed in a north-easterly direction and joined the Bhagirathi near Ambowa (Ambika Kalna?) or still further north at Nudia (Nadia).

By superimposing the present Damodar network on the rivers shown in Rennell's map, only the trend lines indicating the changes that have taken place over the last 200 years become discernible. As Rennell's survey was not as accurate as it can be today, the directional change in the courses of the rivers and the magnitude of the migrations cannot be determined accurately. In Rennell's map, two old courses of the Damodar are seen—one bifurcates from Selimabad, flows in a south-southeasterly direction and then takes a north-northeasterly course, finally meeting the Bhagirathi near Naya Sarai and the main course flowing in a southerly direction past Amta and falling into the Bhagirathi. Another bed of the old Damodar is still seen from below Burdwan which has an easterly direction till it joins the Bhagirathi near Kalna, following approximately the course of the present Gangur river.

"In a map by Du Gloss, one of Rennell's assistants, dated 1776, the lower Damodar is shown very much as at present though narrower at its mouth and called by its old name, the Mandal Ghat river. It split at Amta into three small creeks, so that the high flood discharge of the Damodar must have spilled and could not have been carried into the Hooghly by one channel. It seems probable that the Damodar has at no time discharged all its water into the Hooghly above its present outfall, but before the middle of the 18th century, at times, quite a fair percentage of its supply must have entered above the Moyapur bar when the upper branches such as the Banka Nadi, the Kunti Nadi and the Kana Damodar alternately were operating. Since the last diversion of the Damodar about 160 years ago, the upper section of Hooghly has been deprived of this additional supply."[86]

To sum up, a study of the lower reaches of the Damodar clearly reveals the swinging nature of the river. In 1550 (after De Barros's map) the main flow of the river was restricted to the present Kana Damodar channel. In 1660 Van den Broucke showed that the principal current was flowing through the 'Maja Damodar' and joining the Rupnarayan near the present Bakshi Khal. A large quantity of Damodar waters then came down the present Gangur and Behula channels, finally falling into the Bhagirathi near Kalna. The other branch coursing past Amta and known as the Mandal Ghat river was no bigger than an ordinary *khāl* in 1690. About that time the Kana Damodar was deteriorating very rapidly and the charts of 1720 and 1730 represent it as a very narrow stream. Ritchie and Laeam's chart of 1785 shows that the Kana Damodar was then an insignificant creek. During Rennell's time (1764) the bed level of the Kana Nadi had risen and he showed this river as the old bed of the Damodar. Du Gloss (Rennell's assistant) in 1776 mentioned the Damodar flowing past Amta as the lower Damodar. In 1823 and 1840 the big floods, having a discharge of more than 4,50,000 cusecs at Raniganj, flowed through the Amta channel of the Damodar. This evidently shows that between 1700 and 1850, the Damodar flood-waters had been flowing alternately through the channel skirting Amta, the Kana Damodar (a derelict stream now), the Kausiki, and the Kunti Nadi, which are now mere trickles and often unrecognizable. The last big change occurred with the opening of the Begua channel some 4 miles (6.4 km.) below Jamalpur in 1865. At present most of the Damodar flood-water flows through this channel, which is known as the Kaki river below Muchibana, and thereafter through the Mundeswari, finally falling into the Rupnarayan.

Changing drainage conditions of the Damodar

It is clear from the preceding account that up to the 16th century the main flow of the Damodar was confined to the Kana Damodar. In the 17th century it was along the Banka-Behula-Gangur line. In

the first half of the 18th century, it used to drain through the Kana Nadi, the Kunti Nadi and the Kana Damodar but during its second half the Amta course of the lower Damodar came into prominence; but this was also silted up and finally the drainage line shifted to the Kaki and the Mundeswari channel.

A drainage survey of the region was undertaken between 1853 and 1857 by knowledgeable persons like Capt. J. P. Beadle, Lt. David Limond, C. Mcguinness and others. To ascertain the then (1856) drainage problems in the lower Damodar valley, Beadle surveyed the drainage lines of the Damodar (passing through Amta) and the conditions which prevailed in the trans-Damodar area. David Limond surveyed the dwindling streams, the Kana Nadi and the Kunti Nadi. It was noticed that the numerous embankments were causing an artificial interference in the natural development of the Damodar delta. Their upkeep, again, was neglected since the middle of the 18th century as the *pulbandi* charges realized by the Government from the landlords for repairing the embankments were sometimes assessed so high that the zemindars (in this case the Burdwan Raj) fell into arrears. Various experiments followed resulting in Government's eventually taking over the maintenance of the embankments. Under Government supervision a marked improvement was noticed by 1845 when no fewer than 89 masonry sluices were constructed replacing the cuts formerly made by the peasants. In 1846 a committee made the drastic suggestion that all existing *bāndhs* should be removed entirely. But this brave plan was never carried out as the Damodar in the meantime played havoc with its banks, which, between 1847 and 1854, were breached in numerous places nearly every year. The question of maintaining the *bāndhs* was thus forced on the attention of the Government and the river was prevented from pouring its flood-waters on its left side by means of a better fortified embankment. In 1855 it was decided to remove the right embankment for 20 miles (32.2 km.), retaining only such portions of it as were situated at angles and curves of the river where the current bore directly upon the land. These decisions were implemented before the flood season of 1859 and the Damodar, unrestrained by embankments on the west, made a large breach at Begua in Burdwan and caused immense damage to the winter crops in Arambagh and Khanakul police stations.[46] The left bank embankment had to be maintained at a heavy cost to protect the newly constructed railway and the old Grand Trunk Road, but this resulted in the withholding of the waters of the Damodar into the Khari (in Burdwan district), the Banka and the Behula which now merely collect water from paddy fields.[47] This disintegration of the drainage system brought in its wake the notorious Burdwan fever which wiped out one-third of the population of the Damodar delta.[48] The decision to abandon the right embankment to decrease pressure on the left was, from the

outset, an unbalanced remedy. "This very extraordinary situation of an erratic river, debouching into a dead flat flood-plain after draining a badly eroded plateau, being embanked only on one side has prevailed for over a century. It has led to a one-sided building up of land and various other complicated problems. They are baffling the present day engineers."[69]

Beadle's map of 1856 shows the Damodar, from Burdwan to 14 miles (22.5 km.) below it, averaging one mile in width with a fall of 13 feet per mile. It then meets higher ground and turns to the south for 56 miles (90.2 km.), averaging half a mile in width or even less, with a fall of 1.1 feet per mile. The banks average 10 feet (3 m.) in height; at Amta they are 15 feet (4.6 m.) high. The floods rise from 14 to 16 feet (4.3 m. to 4.9 m.) above the level of the dry weather stream and the tide runs up to a little above Amta.[70] A flood having a discharge of 2,53,082 cusecs at Burdwan reached Amta with a discharge of 76,516 cusecs. So, only about one-third of the flood-water at Burdwan passed through Amta.

About the Damodar Khal (present Maja Damodar) Col. Goodwyn reported in 1856: "The clearness of the water may be mainly attributed to the Damoodah receiving no drainage or tributary, from 30 miles above Burdwan to Omptah (Amta), a distance by the river of fully 120 miles. Below Omptah it changes its character, flows through the valley of the Hooghly and receives a greater part of the drainage of the two Mundulghaut estates; yet here, with all this accession of volume, the channel bed is narrower than it is above."[71] Today the Maja Damodar meanders through extensive orchards and vegetable fields. Garh Bhabanipur in this area is a collecting centre for the agricultural produce. The stream turns westwards, passes through Jhikra and joins the network of water courses formed by the Mundeswari. Here are large swamps along the margins of which *boro* paddy is cultivated. As flood-water comes down the channel during rains, it is flushed clear of weeds and water hyacinth

According to Beadle, the trans-Damodar area, particularly the lands below the Arambagh-Champadanga Road, have always been inundated even by ordinary floods. Below Puspore, the floods have not caused much alarm and done little damage.[72] At that time (1856), most of the Damodar Khal (the Maja Damodar) below Rajbalhat was dry. The main drainage line in this area, which started just below Mohanpur, was 'Sunkurree Nallah' which, running parallel to the Damodar, used to join the Kana Dwarakeswar near Chingria village. A *khal* named 'Mondasurree' used to meet the Sunkurree Nallah below Arambagh Road. Thus the drainage channels in the area at that time were Sunkurree, Mondasurree Khal and Dwarakeswar. After the construction of a temporary dam across the Damodar near Mohiddipur soon after 1856, its waters used to flow through Begua Khal and then through the Sunkurree Nallah. Today the

Mundeswari has become the main drainage channel in this tract. In 1856 the Damodar Khal (Maja Damodar) caused devastation to this area mainly due to spill and low topography. But today its upper reach is dry and the lower course derelict. Much sugarcane is grown opposite Champadanga and extends to Udaynarayanpur and Gaja. This area is famous for the production and export of *gur*.

A hundred years ago, the eastern branch of the Kana Nadi was a river of inundating type, particularly between Selimabad and Baldanga. The main channel of this river now flows towards the east giving off two distributaries, the Kana Damodar, and lower down, the Kausiki which later joins the Kana Damodar. From the latter point the Kana Nadi is known as the Kunti Nadi. The Kana Damodar and the Ranabandh Khal are today mere drainage channels of the country sloping inwards. The levels taken by Lieuts. Picle and Johnstone show that the drainage of the country, between the Kana or Kunti Nadi and the Bhagirathi, is inland with respect to each river, and is finally carried off by the Saraswati Khal.[73] Probably the Kana Damodar like the Kana Nadi never caused disastrous floods, because it is the only river among the 'blind' ones which becomes broader downstream. There are potato fields and vegetable gardens spreading for miles along both its banks which are fed by lift irrigation from the stream. During the winter months it now breaks up into a number of stagnant pools and ultimately dries up. But place names like *Jāhājpotā* and *Jāhājghāṭā* (meaning respectively the burial ground of a ship and a jetty) and the discovery of excavated remains of big boats from the bed of the river amply prove that the Kana Damodar was a sizeable river in the past and not a mere overflow irrigation canal as suggested by Willcocks.[74]

A study of the historical hydrography of the Kana Nadi provides ample evidence that when the river was open, it was capable of spilling over the embankments. David Limond wrote: "The drainage of the country contained between the semi-circle of the left bank of the Kana Nadi is carried off by the Ghea Nadi and tributary khals, of which there are several between the left bank of the Ghea and the Grand Trunk Road and the tract of country drained is such that it has been found necessary to embank the lower part of the former river."[75] Indeed, the channel in 1856 was 900 feet (274 m.) wide at Selimabad and only 230 feet (70 m.) at Kamalpur. In 1933, i.e. within an interval of 78 years, the width at Selimabad became 134 feet (41 m.) and at Kamalpur 268 feet (80.4 m.), the distance between the two points being only 11 miles (17.7 km.). With the shifting of the main drainage line of the Damodar along the Kaki and the Mundeswari, the entire Kana Nadi and Kana Damodar basins came to experience water scarcity. Today D.V.C. projects operate for a unified development of the Damodar valley by providing new irrigation canals and resuscitating the dead and dying drainage channels of

The Damodar irrigation canal network

the Damodar on its left bank for control of waterlogging and floods. At present dry areas in the Kana Nadi and Kana Damodar basins covering Dhaniakhali, Tarakeswar, Jangipara, Haripal, Chanditala, Polba, Pandua and Singur police stations have begun to be served by a network of artificial canals, 250 miles (403 km.) long, which irrigate 1,10,133 acres (44,053 hectares) of *Kharif* and 19,810 acres (7,924 hectares) of *Rabi* crops.[76] Another source, however, states that the district has 500 miles (805 km.) of such canals irrigating 526 square miles (1,362 sq. km.) on the left bank and 40 square miles (104 sq. km.) on the right bank of the Damodar.[77]

The oldest datable irrigation canal in this region is the Eden Canal taking off from the Banka near Burdwan and running parallel to the Damodar along its left bank up to Jamalpur. Constructed in 1873-1881, its original purpose was to flush the adjacent river beds and to provide drinking water in the neighbouring areas. Subsequently, it came to be used for irrigating 25,000 acres (10,000 hectares) of paddy lands.[78] Since the last decade of the 19th century various schemes for the rejuvenation of silted-up rivers like the Kausiki have been considered but seldom executed. The construction of the Anderson Weir and the Damodar Canal in 1926-33 was intended to supply more water to the Eden Canal and to irrigate an additional 1,61,000 acres (64,400 hectares) of paddy lands. But this scheme did not succeed, as, once in 5 years on an average, the flow of the Damodar in October was too low to meet the irrigation requirements. Consequently, 60,000 acres (24,000 hectares) under perennial irrigation had to depend on storage tanks scattered about the area.[79] With the inception of the D.V.C., resuscitation of drainage channels is taking place along the basins of the Kana Nadi, the Kana Damodar, the Ghia and the upper reaches of the Gangur and the Behula.

The D.V.C. had its seed sown in 1925, when Dr. C. A. Bentley advocated the reintroduction of flood-waters in the area between the Damodar and the Bhagirathi in his book *Malaria and Agriculture in Bengal*. Subsequently in 1930, Sir William Willcocks made a similar plea in a series of lectures at the Calcutta University which were collected in book form under the title *Ancient System of Irrigation in Bengal*. In 1931 Mr. C Addams-Williams stated that "the principle involved in increasing the fertility of the soil and decreasing the ravages of malaria by the use of silt-laden water is one which has been accepted by the Irrigation Department of this Province." In 1939 the 'Damodar Valley Flushing and Irrigation Scheme' was prepared, the purpose of which was to flush out the moribund rivers and the insanitary pockets in the region and to irrigate some 4,27,800 acres (1,71,280 hectares) of land out of an area of 806 sq. miles (2,088 sq. km.) extending from the Banka Nullah on the north to the Rajpur swamp on the south including the Eden

Canal zone.[80] The indifferent performance of this scheme called for more comprehensive planning. "It was not until the (Damodar) floods of 1943 hampering the war efforts of the Government of India that some effective and urgent steps were taken. The 10-man enquiry committee, set up and asked to suggest long-term measures, mooted for the first time the idea of tackling the problems on the model of the Tennessee Valley Authority of the U.S.A. The services of Mr. W. L. Voorduin, senior engineer on the staff of the T.V.A., were secured. His suggestions were scrutinised by Indian as well as American experts, and finally, after a meeting of the Government of India and Governments of Bengal and Bihar, there emerged the Damodar Valley Project in April 1946. The Damodar Valley Corporation Bill was sponsored in the Constituent Assembly of India in December 1947 and the D.V.C. Act was passed by the Parliament of India on the 18th February 1948. Out of this Act was born the Damodar Valley Corporation on the 7th July 1948."[81]

Sluices

Most of the drainage and irrigation sluices occur on the left bank of the Damodar. On the right bank there are 2 sluices at Srirampur and Batomchak. Utilization of sluices on the left bank is below rated capacity and some can be operated only during floods.* Generally, flushing is done through the Kumrul, Champadanga and Binogram sluices according to local demands. The left bank sluices within the Hooghly district are still used for irrigational purposes and 11,856 acres (4,742 hectares) of land are irrigated by flood flushes. A huge amount of sediment is usually deposited during floods in the sluice outlets. Hence silt clearance is necessary for maintaining the sluices in proper working order. The two sluices on the Madaria Khal are more or less at the same level as the bed of the Khal and can accordingly be used both for drainage and irrigation. Most of the other sluices are single-purpose, i.e. they serve either as drainage or as irrigation sluices.

The old sluices could hardly solve any of the drainage and irrigation problems of the district. Both the old Damodar Canal and Eden Canal systems have accordingly been merged in the D.V.C. irrigation network. The D.V.C. has also resuscitated some river channels like the Saraswati and the Ghia and remodelled some of the branch canals and distributaries of the old systems. The principal canal of the D.V.C. in the Hooghly district is the navigation-cum-irrigation canal to the east of the Damodar which runs for 85 miles (136.9 km) and joins the Bhagirathi at Tribeni. The scheme entered into its constructional phase in early 1952 with the digging of canals for extending irrigation from the existing Damodar canal system

* The bankful carrying capacity of the main Damodar channel at Champadanga is only 25,000 cusecs as compared to 1,17,000 cusecs of the Mundeswari at Harinkhola.

and for relieving drainage congestion of swampy areas.[82] The canals have been designed on the basis of the latest non-silting and non-scouring velocity principles and their slopes have been designed in accordance with Lacey's 'Regime Channel Slope', due consideration being paid to the ground slope to minimize the extent of earthworks. The irrigable area has been divided into suitable blocks which are directly fed by small village channels excavated and maintained by the collective enterprise of the villagers themselves.[83]

The D.V.C. started supplying irrigation water in 1957-58 for a target area of 2,195 sq. miles (5,707 sq. km.) of which only 403 sq. miles (1,048 sq. km.) lie on the right bank of the Damodar. This disparity arises from the fact that the trans-Damodar tract is higher in elevation making canal construction costlier and more difficult. Moreover, this region is so intersected by a network of natural drainage channels that it cannot be irrigated profitably.[84] In this district the D.V.C. has not, therefore, constructed a single canal on the right bank. The trans-Damodar region will be benefited by the canal system of the Kangsabati project in the immediate future.

A list of the D.V.C. canals on the left bank of the Damodar together with the names of the *mauzās* and police stations in the Hooghly district through which they pass is given in Appendix—B at the end of this chapter.[85]

The Dwarakeswar

The third largest river, the Dwarakeswar, enters the district between the Mandalghati and Mahiari villages and forms its north-western boundary for about 7 miles (11.3 km.). After flowing for about 14 miles (22.5 km.) through the district, it divides into two branches below the village Bali-Dewanganj in Khanakul P.S. The western branch, called the Jhumjhumi, after a course of 3 miles (4.8 km.), enters the Ghatal subdivision of Midnapur and falls into the Silabati while a minor distributary of the Jhumjhumi, turning east, unites with the Sankra a few miles above Bandar. The eastern branch, the Sankra, flows south-east through the Arambagh and Khanakul police stations and at Bandar, unites with the Silabati to form the Rupnarayan. The Kana Dwarakeswar, the ancient and main channel of the Dwarakeswar (*vide* Valentijn's map of 1670), branches off a few miles north-west of Arambagh town and flows in a south-easterly direction to meet a braided channel (the Damodar Khal) of the Mundeswari above Chingria. The combined stream then flows on and meets the Mundeswari at some distance within the same subdivision.

The bed of the Dwarakeswar, as well as of its branches, is sandy and varies from half a mile to a quarter of a mile in width. It is navigable only during the rainy season when country boats ply down to the Rupnarayan. For the rest of the year, it is fordable at most places. Until the construction of a balanced cantilever reinforced concrete bridge with flexible piers just north of Arambagh town in

December 1965, named the Ramakrishna Setu, a temporary dry-weather bridge used to serve a very limited purpose.* The river is not embanked in its northern parts where the banks are fairly high, varying from 6 to 15 feet. From Bali-Dewanganj on the west and Mubarakpur on the east, there are embankments for some 7 miles (11.3 km.) while two other embankments extend from the point at which the river bifurcates joining each other again a little above Chapsa. The eastern embankment from Mubarakpur has been breached at several places and gives little protection to the villages on that side. Catastrophic floods are infrequent in the Dwarakeswar but when, during the monsoons, an occasional freshet rolls down its bed, it spills over the banks at low places for short durations only.

The Rupnarayan

The Rupnarayan is formed by the junction of the Silabati with the branches of the Dwarakeswar near Bandar. It runs south-east for 8 miles (13 km.), forming the district boundary, and, a few centuries back, used to be joined at the extreme south-east, opposite Ranichak, by the Kana Dwarakeswar. Crawford wrote: "A small steamer runs from Calcutta to Ranichak and another *vice versa* daily, while a smaller one runs from Ranichak to Ghatal. ...It was known to the early English settlers in Bengal as the Tomberlee or Tumberleen river. The forms Tumbolee and Tameli are also used; probably these names were corrupted from Tamluk."[86]

The Deb Khal, the Amodar and the Tarajuli Khal

Other tributaries of the Dwarakeswar worthy of mention are the Deb Khal, the Amodar river and the Tarajuli Khal. The Deb Khal enters the district at Salikona from the Vishnupur subdivision of the Bankura district and following a tortuous course almost parallel to the Dwarakeswar, joins it a few miles below the point of off-take of the Kana Dwarakeswar. The Amodar, coming from the Joypur police station of the Bankura district, flows south-east through the Goghat police station past Bhitagarh and Garh Mandaran and after joining the Tarajuli Khal near the district boundary, finally debouches into the Jhumjhumi branch of the Dwarakeswar in the Ghatal subdivision of the Midnapur district The Amodar is not shown in any old map but finds mention in the mediaeval ballad *Chandi Mangal* where a route from Burdwan to Midnapur was traced along this stream. The peculiar thing about this small river is that it seldom goes entirely dry. The Tarajuli Khal also rises in Bankura and skirting the north-western boundary of the district, flows through it and then skirts the south-western district boundary to join the Amodar six miles (9.7 km.) below Hazipur. Both these rivers have the usual characteristics of hill streams, namely rapid currents, banks of hard soil, gravelly beds which can be seen through the clear water and features of soil erosion in the valley basins. Except in the rains they are fordable throughout the year.

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* In O'Malley's time 'a bamboo foot-bridge' was all that one could use in the hot weather.

The Saraswati

The Saraswati branches off from the Bhagirathi below Tribeni and flows south-east for a mile and a half then turns south, parallel to and within three miles (4.8 km.) of the main river. West of Chandernagore it meanders south-west up to the village of Burai and then runs south-east till it enters the Howrah district. Below Tribeni the river is now only 10 or 12 feet wide and a foot deep in the hot weather, but in the rains its width increases. The decadence of this once-important river since the 16th century has already been described. A hundred years ago it was a dead river represented merely by a chain of pools. But water was let into it in connexion with the Eden Canal Scheme by a cut from the Kana Nadi near Gopalnagar. Though very much silted up now, its banks are fairly high (10 to 15 feet) and are still densely populated, especially towards the south, where there are several large villages, such as Burai, Baksa, Janai, Chanditala and Kalipur, flanking its channel.

Bali Khal

Below Tribeni several creeks fall into the Bhagirathi after draining the interior of the district. The southernmost of them is the Bali (Bally) Khal which forms the southern boundary of the district for several miles. It drains the Dankuni marsh and is now used as the outfall of the Dankuni drainage channel. In its lower reaches it is not fordable and is navigable throughout the year by boats of fair size. Both the bed and banks are clayey, furnishing excellent material for brick manufacture, numerous units of which have come up along its banks.[87]

The Mundeswari, the Besia Khal or the Kaki Nadi, the Kana Dwarakeswar, the Maja Damodar, the Harinakhali Khal etc. traversing the Damodar-Dwarakeswar interfluve have all been dealt with in the preceding pages. In the Damodar-Bhagirathi interfluve, the Kana Damodar, the Kausiki and the Madaria or Ranabandha Khal, the Kana, the Ghia, the Kunti, the Banka, the Gangur, the Behula, the Saraswati etc. have also received attention in the preceding sections on the Damodar and the Bhagirathi river systems.

DRAINAGE

Dankuni drainage works

"The only drainage works lying entirely in the district are those designed for the drainage of the Dankuni marshes. These marshes, which are about 12 miles long from north to south, are situated in the Serampore subdivision. They consist of a chain or series of *jhils*, i.e. swamps wholly or partially covered with water, which lie between the Hooghly (Bhagirathi—Ed.) and Saraswati rivers. The total area of land between these rivers is about 70 square miles, of which 8 square miles drain direct into the Hooghly, while 62 square miles form a basin, in the central part of which are the Dankuni *jhils* occupying an area of 27 square miles. This latter area was not only a reservoir for the rainfall which falls over the 62 square miles, but the lowest part was 9 feet below high-water level during the rainy season; and prior to its being drained, when the Hooghly was in

flood, the tides flowed through the Baidyabati and Bally Khals and raised the level of water in the *jhils* to 15 feet in the month of August, the beds of the *jhils* being about seven feet above mean sea-level. The area of cultivated land varied with the seasons, the minimum being 10½ square miles and the maximum 27 square miles, but a part of this doubtful zone was irregularly cultivated with cold weather crops."[88]

Following the ravages of the Burdwan fever, Mr. Adley, a civil engineer, was deputed by Government in 1869 to report on the drainage conditions in the Hooghly district and his findings were: (*i*) that the district stood much in need of drainage, (*ii*) that this was in a great measure the cause of the fever, (*iii*) that the rivers and *khāls* of the district had seriously silted up and deteriorated, (*iv*) that, from an engineering point of view, the drainage question could be easily tackled and (*v*) that, if properly conducted, the measures ought to be largely remunerative. Mr. Adley recommended in particular the reclamation of the Dankuni, Katlia and Rajapur swamps, the deepening of the *khāls* and improvement of their embouchures, the reopening of the Kana Nadi, the adoption throughout the district of "high and low level drains, to serve the treble purpose of drainage, irrigation and navigation," and the introduction of general sanitary measures. The work relating to the Dankuni marsh was taken up in January 1873 and was completed in the same year.

The scheme, according to O'Malley, consisted of "(1) drainage channels, 16½ miles long, excavated through the lowest ground in the middle of the *jhils* and leading to the Baidyabati Khal on the north and the Bally Khal on the south; these two *khals* have also been partially straightened, widened and deepened; (2) two self-acting sluices, one in each *khal*, with three openings and double gates; and (3) an iron-girdered two-spanned bridge over the Serampore-Chanditala crossings. The total cost amounted to Rs. 3,97,395, which, with maintenance charges capitalized, have been recovered from the persons interested. The work proved a great success from the first, all the available waste land being brought under cultivation within two years, while the annual report of the Sanitary Commissioner for 1874 stated that a large tract of country, which was formerly the centre of much disease and mortality, had become healthy owing to their completion. ...

Rajapur drainage works

"Colonel Haig, who was deputed to make an engineering survey of the district, proposed in 1873 to extend the Dankuni scheme to other tracts in the south and submitted three drainage schemes, known as the Howrah, Rajapur and Amta schemes. The Howrah and Amta schemes concern the Howrah district only, while the Rajapur drainage works drain the southern extremity of Kristanagar thana (the Jangipara P.S. of the present day—Ed.) in the Serampore subdivision, but lie for the most part in the Howrah district. These

works were constructed under the revised Drainage Act VI of 1880, under the provisions of which a small drainage channel west of Rampur was also constructed in 1907-08 at a cost of Rs. 3,947."[89]

Lakes and marshes

Today there are no lakes in the district, but a number of large catchment basins are seen in which water accumulates during the rains forming marshes. These swamps contain some water even in the summer months. Most of these marshes are to be found in Pandua, Polba, Chanditala, Jangipara, Uttarpara, Pursura and Khanakul police stations and some of them are of considerable size, e.g. the Khanyan marsh between the old silted-up channels of the Damodar in Pandua P.S., the swamp between the Ghia and the Kana Nadi, the Dankuni marsh lying between the Saraswati and the Bhagirathi and presently divided into numerous segments by roads and railway embankments, the marsh between the Damodar Khal and the Kana Dwarakeswar in Khanakul P.S., the Kumirmora Bil lying to the west of the light railway line between the Kalachhara and Jangalpara railway stations, the southern Khanakul marsh below the confluence of the Chaubis Bigha Khal and the Kata Khal (at 22° 41′ N.) at Baligari and the Sultanpur Bil at the confluence of the Amodar and the Tarajuli. In a previous section on the topography of the district mention has been made of the oxbow lakes occurring in the Balagarh police station.*

FLOODS

"The district, being a low-lying tract with an abundant rainfall and intersected by three large rivers and numerous smaller streams, suffers more frequently from floods than from drought.† Formerly. floods were not only of frequent occurrence, but were also attended with great loss of life and property, especially during freshets, when the water in the rivers was banked up by strong southerly gales or high spring tides. Early records show that about 1660 A.D., a strong freshet in the Hooghly river swept away the old Dutch factory in Hooghly town; while on 3rd September 1684 the river rose so high that it was 3 or 4 feet above the level of the Hooghly Bazar and swept away more than a thousand huts in the Dutch quarters at Chinsura. Such destructive inundations have been rare during the period of British rule, probably because the level of the west bank of the Hooghly has been gradually raised."[90]

The turbulent Damodar has caused much more harm than the Bhagirathi and there is record of its ravages extending over more than a century and a half. The earliest recorded flood reported by O'Malley occurred in October 1787 when the Damodar burst its bank near

* Underground water resources have been dealt with later in this chapter as a part of geological formations.

† According to Census 1951: West Bengal District Handbooks: Hooghly, there had been 10 floods and only 6 droughts in the district in a 60-year period from 1891 to 1950. The frequency of floods appears to have been under-estimated but that of droughts calls for no comments.

'Barderee' and swept away '*hats*, temples, *ganjes* and *golas*.' From the records of the Bengal Government (from 1852) relating to the Damodar floods and embankments it appears that the inundations of the Damodar could not be controlled because of the lack of detailed knowledge about uncertain monsoon conditions depositing widely varying quantities of water in the upper catchment areas of the Damodar, an inadequate comprehension of the mechanisms by which the lower valley disposed of this water through distributaries or through blind spill-overs forming waterlogging conditions and the subsequent occurrence of high flows from the flood-plains. It is found from investigations carried on over the years that the range of possibilities in storms as well as in heavy monsoon rains and surface responses is so great and the statistical data so inadequate that hydrologists differ greatly in their judgments. Indeed the 'man-land-water system' of the lower Damodar valley still presents difficult problems not only in the physical relationships yet to be established by the hydrologists, meteorologists and physical geographer, but also in the cultural-physical interactions to be studied by the geographer in both these fields.[91]

Floods occur in the lower reaches of the Damodar during the monsoons, i.e. from May to mid-October.* Peak flow with a discharge of about 6,00,000 cusecs was recorded in the years 1823, 1840, 1913, 1935 and 1941. Peak discharge of about 6,50,000 cusecs was recorded only twice in this century, in August 1913 and August 1935. The corresponding flood volumes were 3.7 million acre-feet and 1.47 million acre-feet respectively. From available records it is found that the flood of late July 1840 was similar in magnitude to that of 1913 but the one which occurred in August 1823 was much more widespread. Floods also occurred in the Damodar in 1866, 1873, 1877, 1887, 1888, 1897, 1898, 1901, 1902, 1903, 1904, 1905, 1906, 1907, 1909, 1910, 1911, 1913, 1916, 1926, 1928, 1933, 1935, 1939, 1941, 1949, 1956 and 1958.

The maximum flood discharge in the Damodar between 1857 and 1917 (61 years), as observed at Raniganj, is reproduced below in Table I from E. L. Glass's report submitted to the Government

TABLE I

FLOODS IN THE DAMODAR FROM 1857 TO 1917 (61 YEARS)

No. of extremely abnormal floods	(above 4,50,000 cusecs)	... 1
No. of abnormal floods	(above 3,00,000 cusecs)	...12
No. of normal "	(between 2,00,000 & 3,00,000 cusecs)	...33
No. of sub-normal "	(below 2,00,000 cusecs)	...15

* The Director of Meteorology, Poona, furnished the following definitions of floods and droughts: "If the actual rainfall during May to October in the district was in excess of the 'normal rainfall' by 1½ times the 'mean deviation' or more, that year is called a 'flood' year. On the other hand, if the actual rainfall was in *deficit* by 1½ times the 'mean deviation' or more, that year is called a 'drought' year. If the actual rainfall lies between (*a*) normal rainfall plus 1½ times the mean deviation and (*b*) normal rainfall minus 1½ times the mean deviation, the year is reckoned as a normal year."

of Bengal in 1918. Corresponding data[38] for the period from 1935 to 1954 (20 years), as observed at Rhondia, are given in Table II.

TABLE II

FLOODS IN THE DAMODAR FROM 1935 TO 1954 (20 YEARS)

No. of extremely abnormal floods	(above 4,50,000 cusecs)	... 2
No. of abnormal floods	(above 3,00,000 cusecs)	... 6
No. of normal ,,	(between 2,00,000 & 3,00,000 cusecs)	... 9
No. of sub-normal ,,	(below 2,00,000 cusecs)	... 3

An admirable account of the numerous floods in this "river of sorrow" was given by O'Malley in the old Hooghly District Gazetteer. We have already mentioned about the earliest recorded flood in 1787. O'Malley described the more important of the others as below: "On the 26th September 1823 it (the Damodar) again rose in high flood and bursting over its banks inundated the country up to the Hooghly river, which also rose to an unprecedented height. Chandernagore suffered considerably; in the streets of Serampore boats were plying; the College being surrounded by water; and in Hooghly town, Dharampur, Malla Kasim's *hat* and Bali were submerged and the roads rendered impassable. In the mofussil the police thanas of Rajbalhat (now Kristanagar)* and Benipur (now Balagarh) were swept away, and the police officers had to take refuge in boats. The homeless villagers poured into the town of Hooghly, where they found shelter in sheds erected on the site of the Mughal fort (the old court house). The distress which ensued may be gathered from the report that 'the extent of injury that has been sustained is beyond human relief.' Ten years later, on the 21st May 1833, the Damodar again flooded the district, washing away the bridges over the Saraswati at Tribeni and over the Magra *Khal* at Nayasarai. Subsequently. in August, 1844, the Damodar burst its banks and marginal embankments in 170 places and submerged the whole country between Bali Diwanganj and Dhaniakhali, the flood water spreading as far as Hooghly and Chinsura and filling up the ditches and drains of those towns. In September 1845 the Damodar again flooded the south of the district. The Burdwan and Chandernagore roads were under water in many places, and the four suspension bridges were threatened with destruction. The inner or zamindari *bandhs* were so completely destroyed, that their owners never attempted to repair them; after the floods not a stalk of paddy was to be seen for many miles; and the inundation was described by one officer as 'frightful'. A drought following the flood intensified the distress, and people began to migrate to Calcutta and Serampore for work; but, beyond advances of Rs. 500 to each of the Subdivisional Magistrates of Dwarhatta

* The present name of this police station is Jangipara.

(now Serampore) and Jahanabad (now Arambagh) for the relief of urgent cases of distress, no relief measures were deemed necessary.

"The continued ravages of the Damodar attracted the attention of Government and after protracted enquiries extending over several years the embankments on the left bank were strengthened while those on the right bank were abandoned for a distance of 20 miles (32.2 km.). *Its flood water consequently* poured over the western tract in thanas Jahanabad (now Arambagh) and Khanakul, destructive inundations occurring in this locality in August 1856, in July 1859 (over 267 square miles), in 1867, and in August 1885. The flood last mentioned was due to a continuous downpour of rain, which not only submerged the rice crops in the fields, but also caused high floods in the Hooghly, Rupnarayan, Damodar and Dwarakeswar rivers. The embankments were breached, and nearly the whole country laid under water. In the eastern portion of thanas Jahanabad (now Arambagh) and Khanakul, the floods lasted for many days, whilst in several places they did not subside for over a month. It is an extraordinary fact that no loss of life from drowning was reported, but the health of the people suffered considerably, for cholera broke out in some villages and malarial fever prevailed. The damage done to the crops of the affected tracts was most serious, the rice crop over an area of about 233 square miles being damaged or almost entirely destroyed. Over two thousand houses were reported to have fallen, and half as many more were badly damaged, the inmates betaking themselves for shelter to the houses of their more fortunate neighbours. The after effects on the flooded lands varied very much in different places. A fertilizing deposit of muddy silt overspread many villages, but a deep layer of barren sand buried the cultivable soil of others. Government granted a sum of Rs. 1,000 to relieve the most urgent cases of distress, and the Calcutta Central Committee contributed Rs. 2,000 towards the same object, while Rs. 2,000 were advanced under the Agriculturists Loans Act. The Public Works Department expended considerable sums in repairing the breaches in the embankments, and the Road Cess Committee allotted Rs. 3,000 for the repair of village roads in the flooded tracts. These measures saved the labouring classes from any prolonged distress. A few years later the Damodar pouring through the Begua breach in Burdwan scoured out a new channel for itself 2 to 3 miles west of its old bed.

"During the present century high floods in the Damodar were reported in September 1900, September 1901 and July 1905. The heavy rainfall from 27th to 29th July 1905 caused high freshets in both the Damodar and the Dwarakeswar. Their overflow inundated thanas Arambagh and Khanakul, damaged more than 600 houses and destroyed the winter rice, while the Dwarakeswar flooded the

town of Arambagh. It must be remembered, however, that the loss of winter rice in this tract is largely counterbalanced by excellent *rabi* crops, and in thana Khanakul by extensive crops of *boro* paddy, the water for which is stored by means of dams across the river beds."[38]

Some information on flood damages in the first half of the present century is available in volume I of the 'Report of the Damodar Flood Enquiry Committee' of 1944, which mentions that due to a breach of the left embankment during a moderate flood, all traffic had to be suspended on the East Indian Railway from 18 July 1943 to 8 October 1943. The cost incurred for the diversion of traffic alone amounted to more than Rs. 53 lakhs and the repairs to roads and railways including construction of new waterways, culverts and bridges cost several times that amount. An estimate put the total damage at Rs. 8 crores. There have been at least four subsequent occasions when the peak discharge, if unregulated, would have been far in excess of the flow of 3,00,000 cusecs recorded in the 1943 flood. Peak discharge on each of these occasions* into the Maithon and Panchet reservoirs would have increased lower down because of the uncontrolled catchment and, therefore, would have further exceeded the 1943 flood in severity but for the D.V.C. dams.

The decision taken by the Government in 1857 to breach the right embankment to relieve the one on the left was at best a negative solution. A more constructive proposal for flood control through construction of reservoirs was first mooted as early as in 1863 and in January 1864 Lt Garnault made a survey of the Damodar basin for locating storage reservoirs sites. A supplementary survey was undertaken by Lt Heywood in 1866. In 1902, Mr. Horn, and after the record flood of August 1913, Mr. Addams Williams, both Superintending Engineers, recommended a reservoir on the Barakar river just above its junction with the Damodar. (Incidentally, this is the site where the Maithon Dam stands today.) The last investigation on flood control measures was undertaken after the disastrous floods of July 1943 and its findings were largely incorporated in the Damodar Valley scheme. Since the commissioning of the D.V.C dams the ravages of Damodar floods have been mitigated to a very great extent but as these dams and reservoirs are outside the Hooghly district we need not go into their details here. But it must not be

*Table of discharge figures (in cusecs)

Flood Period	Unregulated Peak	Regulated Peak	Moderation
1958 (Sept. 11th-19th)	5,55,000	1.75,000	3,80,000
1959 (Sept. 30th-Oct. 5th)	6,23,000	2,88,000	3,35.000
1961 (Sept. 29th-Oct. 4th)	5,16,000	1,61,000	3,35,000
1963 (Oct. 24th-26th)	5,49,000	90,000	4,59,000

(Source: D.V.C. Handbook)

forgotten that flood protection measures operating in the upper Damodar region constitute the principal reason for decrease in flood hazards in the lower Damodar valley, a part of which lies within the Hooghly district. (The steps taken to arrest local inundations since the inception of the D.V.C. have been discussed in the chapter on Agriculture and Irrigation.)

River communications

The section of the Bhagirathi forming the eastern boundary of the district is navigable throughout the year. The Howrah Bridge, however, does not permit ocean going vessels to ply further up the river. The Damodar was once a navigable waterway up to Asansol when Raniganj coal and agricultural produce used to be ferried to Calcutta along its course. Due to the deterioration of the Damodar channel such cross-country traffic has come to an end. Previously, country boats used to handle all agricultural traffic in the interior of the Hooghly and Howrah districts. But today most of the channels have been silted up and no country boat can ply on them except during the monsoons. The tidal flush, which alone allows water borne traffic during the dry season, moves only up to Amta. The following table would show that only vessels of moderate size could ply along the Rupnarayan, the Dwarakeswar and the Damodar during the 1950-60 decade.[94]

Name of river	Navigable up to	Max. draft for high water	Max. draft for low water	Max. size of vessel
Rupnarayan	Bandar	4′ to 5′	3′ to 4′	130′×19′
Dwarakeswar	Kongra	2′6″ to 3′	2′ to 2′6″	50′×18′
Damodar	Amta	4′6″ to 3′	3′ to 4′	75′×10′

D.V.C. navigation canal

The Damodar left bank irrigation-cum-navigation canal taking off from the Durgapur headworks and connecting the Hooghly industrial belt is a very important addition to the inland water transport system of the district. It runs for 86 miles (138.5 km.), including a mile of the Kunti river which it meets a little above Tribeni, and has a bed width of 172 feet (52. 6 m.) at the head and 60 feet (18.3 m.) at the tail end. It is proposed to maintain a clear depth up to 12 feet (3.7 m.) during the rainy season but during winter and summer, when the requirements of irrigation reduce the discharge through the main canal, the D.V.C. expects to maintain a minimum depth of 7 feet (2.1 m.) of water up to the Kunti lock. The canal is closed for repair and maintenance from 1 April to 31 June each year. As the water-level in it is greatly reduced during winter and summer, it is essential to regulate the channel by locks to maintain a minimum draft of 7 feet. Though these locks obstruct speedy movement of crafts, they cannot be dispensed with in the interest of ensuring the required draft. The locks have been so designed as to serve the requirements of 200-ton crafts which may transport up to 2 million tons of goods per year. Six berths for loading and un-

loading have also been constructed. On 10 October 1963, the canal was opened to commercial traffic which would not be charged any fees for the first five years. The operation of the canal was transferred to the Government of West Bengal with effect from 2 December 1963. Electrical operation of the 23 lock-gates is in view. Fast moving vessels are not allowed to ply in the canal so that the canal banks (which are not pucka) may not suffer by wave action and shore wash. The canal is supposed to handle bulky materials like coal, finished industrial products of the peripheral industrial zones and some agricultural commodities.

Drainage and settlement

The history of civilization is replete with instances showing the growth of human settlements in the proximity of rivers providing a constant supply of potable water and facilities of locomotion along their channels. In selecting the sites, the settlers naturally preferred the banks of rivers which caused the least flood damage. The same principles have also been generally followed in the Hooghly district where we find linear settlements along the rivers with low flood hazards and bee-hive settlements in areas above the 50 feet contour line, that is, where drainage lines are not very prominent and tanks predominate. Linear settlements in the district are found mainly along the Damodar, the Bhagirathi and other placid rivers while bee-hive settlements occur in the northern and western parts of the Sadar and Arambagh subdivisions.

It is found from Rennell's map of 1781 that many prosperous villages of the district were then juxtaposed to the Kana Nadi and the Damodar, especially the former, which was then in a moribund condition. A few important settlements also grew on the old beds of the Dwarakeswar and the Behula rivers which were not menaced by severe inundations at that time. On Beadle's map of 1856, the most important settlements are found on the Bhagirathi and the lower Damodar, the villages along the latter being situated on the right bank instead of on the left. Today populous villages are more concentrated along the Bhagirathi, the present course of the Damodar, the Madaria Khal, the Kana Damodar and the Kunti Nadi, the Maja Damodar and the Dwarakeswar. Important habitations on the Mundeswari are rare because of the high flood potential of the river. It follows from the above study of settlement patterns that occurrence of populous villages in the district has always been closely linked with the changes in the river courses and the prevailing drainage conditions.

It has already been mentioned that there are no lakes in the district. The number of tanks, big and small, is legion. Strewn all over the district, they supply water for drinking as also for irrigation. No information is available about any springs or spring-heads. The subject of underground water resources of the district has been dealt with in the following section on Geology.

GEOLOGY

Paleogeography

The entire geological structure of the Hooghly district is masked by older alluvial deposits of the peninsular rivers and later deposits of the Ganges which until very recently stood in the way of satisfactory interpretation of the underlying series. Geologically, the district is located in the stable shelf area of the western flank of the Bengal Basin. To the west and north, the basin is bordered by an ancient basement of crystalline rocks and Gondwana sediments and to the north-west by the Rajmahal volcanics of Mesozoic age. The primary Pre-Cambrian structures in the area, if any, were apparently smoothened out by very thick flows of basalt trap. The overlying sedimentary sections are very little disturbed tectonically excepting a few gravity faults of uncertain age. Morphologically, the subsurface geological structures represent a coalescing of a large number of alluvial fans. Since the mode of sedimentation and the distribution of the fans are bound up with the geographical history of the rivers, all of them have been considered simultaneously in the previous section. Geophysical surveys and exploratory wells drilled for locating mineral oil reserves have led to detailed investigations which have conclusively proved that the environment of sedimentation was initially marine and estuarine* and then deltaic and fluviatile. Thus, the plains of the district has had a multiple origin and the principal deposits vary in age from the Cretaceous period to the Pleistocene epoch ranging between 135 and 1 million years from now. Specimens of flora and fauna preserved as fossils are too insufficient to date the past or even to permit a broad synthesis of geological history. Pascoe† voiced this hopeless lack of materials and arrived at the conclusion that "so far as the information extends, and so far as the lower strata of this alluvial plain have been exposed in the beds of rivers, not a single marine shell has ever been observed outside the delta areas, nor is there any change in the nature of the deposits such as would render it probable that the underlying strata are marine."[98] Pascoe's contention, however, does not tally with the recent findings of the Indo-Stanvac Petroleum Project in this region. Study of paleogeography has revealed that there has been quite a number of marine transgressions and regressions as evidenced by a thick sequence of shelf facies having a east-southeasterly dip and resting on a basement which lies between 2,000 and 6,000 metres below the surface. The only prominent structural features of this stable shelf are: (*i*) 'basin margin scarp-fault zone' characterized by shallow basement rocks and a system of en-echelon scarps and strike faults and (*ii*) 'shelf zone' characterized by regional homoclinal

* Dates are chiefly after Faul (1960), Kulp (1961), Dunbar (1963), *vide* the latter's *Historical Geology*. New York, 1963. p. 15.

† Hooker (*Himalayan Journal*, Vol. II. Calcutta, 1854) and Theobald (*Records of the Geological Survey of India*, Vol. XIV. Calcutta, 1881) conjectured that in the later part of the Tertiary period, the Bengal Basin was filled up by the sediments borne by the drainage from the northern mountains.

gentle dip. The eastern part of this zone is marked by a long trend of normal faulting which runs through Arambagh. Further eastwards at Chinsura, the zone is marked by a complete absence of structural features.

Systems of geological formations

The dip, nature, extent and stratigraphy of the Jurassic rocks are somewhat deceptive owing to deposition on shelving banks. Generally, the dip is seaward, i.e. towards east-southeast. In the east, the depth of the deposition is considerable. At the base of the Cretaceous system (some 135 millions years old), there is a basaltic strata, most probably of the Jurassic age. Instances, however, are not rare in other parts of India of widespread igneous action on a large scale during the Cretaceous period. All bands of Cretaceous deposition have a general north-east to south-west strike with continental deposits on the west becoming progressively more marine towards the south-east. These deposits consist of shale, claystone, siltstone and sand and their approximate thickness is nearly 1,000 feet. The extent of submergence of the Gulf border can be visualized from the fact that an embayment called the 'Damodar Embayment' reached as far north as the present Jalangi-Debagram (Nadia district) area.

The Paleocene and Lower Eocene epochs (65 to 58 million years from now) witnessed continental, transitional and shallow marine deposition of sand overlain by limestone. The pattern of deposition was more or less similar to that in the Upper Cretaceous period except that the shoreline shifted a little further to the east. There are indications that the Damodar Embayment had moved further south than in the Upper Cretaceous period and remained there till the Middle Eocene times. Marine transgression during the latter epoch again shifted all bands of deposition westward so that the eastern portion of the district is underlain by shallow marine deposits flanked to the west by transitional and continental sediments. Upper Eocene transgression moved the shoreline further west so that the entire district is underlain either by very shallow or shallow marine deposits, chiefly limestones. Because of this large-scale marine transgression, traces of the Damodar Embayment are completely absent

Oligocene regression (started about 36 million years ago) moved the shore line to such an extent that only the south-eastern parts of the district are underlain by marine deposits while the rest of it consists of transitional and continental sediments. The Damodar Embayment again came into prominence and shifted further south than in the Middle Eocene times. Sand is the main fresh water deposit, while shale, claystone and siltstone are the chief salt water facies. The upper boundary of the Oligocene beds is marked by unconformity.*

* It might be of interest to compare this unconformity zone with the Barail bed of Assam which is of the same geological age and marked by similar

During the Miocene transgressive phase (some 25 to 13 million years ago) the sea moved farthest west enclosing the eastern end of the Raniganj area.[96] The whole district is underlain by marine sediments of this period. These sediments are shallow to the west and relatively deep to the east.* The location of the Damodar Embayment is not traceable in the Hooghly district during the Miocene period. In both its upper and lower limits, the Miocene series is marked by a zone of unconformity. The prevailing rocks are mixtures of sand and clay or alternating laminae of the same. Shale, claystones and siltstones predominate over sand.

Marine regression is evident in Pliocene (started about 13 million years ago) and Older Pleistocene times (only 1 million years old) from the continental and transitional sediments. The bedding of this system is the thickest of all formations. The structure on top of Pliocene-Pleistocene represents the base of the Sub-recent where there is an apparent north-south tending sag in the Burdwan-Ghatal environ. It is interesting to note that this sag coincides with the southerly course of the Damodar river. The base of the Sub-recent has an overall low dip to the east. It is only 51 feet (15·5 m.) above sea-level at Galsi and is deepest at Ghatal where it is at a sub-sea depth of 1,237 feet (371·1 m.). The formation thickens in an east-southeast direction.

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The environment of sedimentation in most parts of the district had been deltaic in the last geological period and is fluviatile at present as the deltaic stage has migrated southwards. After a careful examination of the conflicting views of such renowned figures as Oldham, Fox, G. C. Chatterjee, Strickland, Fergusson, Radhakamal Mukherjee, Panandikar and Willcocks as also the relevant physiographic features, Bagchi made the following observation: "A low-lying region characterised by swamps and unhealthy conditions is found extending up to the Hooghly, which partakes of the nature of a deltaic region in some points. But it can be considered more as 'Piedmont Plain'. Moreover, this western tract is not included within the distributaries (Archibald Geikie in his *Text-book of Geology*, Vol. I, propounds the idea that a deltaic region commences from the point where distributaries begin to be given off.—Ed.) of any river. So that, judging by the structure, hydrography, origin and land-form, this cannot be included within the present deltaic region of Bengal."[97] Indeed, the district is mostly a dead deltaic region (as opposed to an active one) built up by the overlapping of sub-deltas of the Bhagi-

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zone of unconformity. Moreover, as in Assam, so in the Bengal basin the Oligocene is characterized by a very small proportion of mineral oil but above the unconformity, i.e. in Miocene beds, the heavy minerals are both more abundant and more varied.

* From a section to the immediate north of the district along Galsi, Burdwan, Memari and Ranaghat, it appears that the thickness of the Miocene series varies from 1,400 feet (420 m.) in the west to more than 2,500 feet or 750 m. (approximately) in the east within the Hooghly district.

rathi and the west-bank peninsular rivers. In more recent works,[66] geographers have adhered to this generally accepted view that the Hooghly district is made up of two geomorphological units—a high old deltaic plain to the west (Arambagh subdivision) and the rest a a dead delta.

Soils

The entire district is covered with alluvia of two different types—older alluvium and newer alluvium. Both are of recent geological age, but part of the older alluvium might be of late Pleistocene age. The older alluvium is found only in the westernmost parts of the district. The greater part of the Goghat thana consists of older alluvium mixed with *kānkar** and laterite debris, which are the detritus of the Bankura uplands.

The rest of the district is mantled by newer alluvium mainly composed of sands, silts and clays brought by the rivers. The eastern part of the district has been built up by the deposits of the Bhagirathi, the western parts of the Hooghly and Serampore subdivisions by those of the Damodar, and the Arambagh subdivision by the combined precipitates of the Damodar, the Mundeswari and the Dwarakeswar. The depth of the deposits can be surmised from the fact that in a boring made at Chandernagore, sub-angular gravels of quartz and felspar were met with at a depth of about 45 metres. The surface alluvium formed from the silt deposits of the Bhagirathi and its branch, the Saraswati, is of sticky clay, rather stiff, not easily permeated by water and hence hard to plough. Because of the large accumulation of finer particles, particularly clay, this soil contains a high percentage of Al_2O_3, Fe_2O_3 and P_2O_5 but low contents of N, MgO and CaO. The alluvium formed from the silt of the Damodar contains a large percentage of sand fractions but very little clay, is loose and easily percolated, and is, therefore, more friable and non-retentive of moisture. When dry, this sandy loam does not cake up. The tract further west consists of loamy alluvium, red in colour, showing signs of mild laterization and moderate leaching with a sub-soil of tenaceous clay, 3 to 9 metres thick, beneath which are found green sands or other alluvial deposits. This red soil is generally deficient in nitrogen, phosphoric acid, humus and lime but contains a reasonable amount of calcium and magnesium. The low lime content makes the soil slightly acidic. This soil is of lighter texture, porous, friable and has some moisture retentive capacity. The soils as a whole are fertile (contents of K_2O and P_2O_5 are high, CaO below 0.6% and nitrogen below 0.20%) and are periodically enriched by fresh deposits of silt from the overflow of the rivers. They are mostly

* According to R. Lahiri: "The kankar formation is associated with 'hard pan' formation in the soil profile by infiltration of calcareous matter so as to form an impervious layer, continuous or intermittent. Sometimes impure iron-oxide layers are also found." (*vide* The Geographical Background of the Soils of India in the *Geographical Review of India*, Vol. XXVI, Number 4. Calcutta, December 1964, p. 144).

light brown and light grey in colour and usually crack up in hot weather and become tenaciously muddy after rain. The soil in the north of the district consists of partly lateritic clay and partly red-coloured coarse-grained sand.

Underground water

According to a report received from the Director-General Geological Survey of India: "Investigations near Tribeni, Bansberia, Sahaganj, Chinsura, Chandannagar, Bhadreswar, Champdani, Serampur, Rishra, Konnagar and Uttarpara have shown the following formations, in general, from the surface downward—top soil, clay and silt, clay, fine to medium grained sand, coarse grained sand occasionally mixed with gravel. The groundwater in these areas occurs in a very thick zone of saturation within the alluvium. The shallow groundwater exists in an unconfined stage, while water in the deeper zones is in a confined condition. Although both clay and sand strata are saturated, only the latter will yield water in economic quantity through wells. This is due to high permeability of the granular material represented by sand. Thus the aquifers consist of coarse to medium grained sand, occasionally mixed with gravel.

"The coefficients of permeability of the aquifers, at the Dunlop Rubber Factory, Sahaganj, are quite high, varying from 3,331 to 5,256 gallons per day per square foot. The depth of the aquifer varies from 73 to 108 metres below the ground level. Within shallow depths the water is characterized by low chloride and high bicarbonate content. The bicarbonates are mostly in the form of calcium and sodium bicarbonates. Specific conductance of this water is 476 micromhs/cm. at 25°C. At Tribeni the groundwater within 120 metres is characterized by low chloride and it is of the bicarbonate type. The total dissolved solids are remarkably low compared to those in Sahaganj area. At Chandannagar the total dissolved solids are 460 p.p.m. and chloride content also shows an increase. The iron content shows a marked rise from a trace at Sahaganj to 0.9 p.p.m. at Chandannagar. Only a few kilometres south at Bhadreswar the tube-wells tap an aquifer at equivalent depth 84 to 119 metres and the same aquifer apparently continues south. However, both iron and chloride contents at Bhadreswar show noticeable decline being 0.4 and 13 p.p.m. respectively. Another sample from a well at Bhadreswar shows only traces of iron and 11 p.p.m. chloride. The sample from a well in Champdani municipal area indicates chlorine 42 p.p.m., total dissolved solids 480 p.p.m. and iron 0.3 p.p.m. The water remains bicarbonate-rich as is indicated by 290 p.p.m. of temporary hardness. The aquifer zone tapped lies between 88 and 120 metres below ground level. The dissolved solids content tends to increase southwards and at Konnagar this value rises to 653 p.p.m., chloride content rises to 130 p.p.m. and iron content to 0.9 p.p.m. The aquifer zone persists with somewhat reduced thickness between 92 and 115.5 metres. At Krishnarampur, the aquifer at shallow

depths 45-49 metres show bicarbonate-rich low-chloride water. The total dissolved solids are 765 p.p.m. In the southern side of the Konnagar municipal area itself, a remarkable change in the quality of groundwater is noticed. In this part the analysis of water from a well, tapping water from the aquifer at 94-119 metres below ground level, indicates a marked deterioration of quality, the dissolved solids being 1,494 p.p.m., the chloride content 456 p.p.m. and temporary hardness 654 p.p.m.

"It has been found out that instead of operating all the wells, an adequate supply of water can be obtained by operating a smaller number of tube-wells, provided the aquifer is subjected to a heavier rate of pumping. From an analysis of the test data, it has been suggested that the pumping wells should be spaced at least 300 metres apart and rate of pumping from individual well should not exceed 1,36,000 l.p.h. In order to determine the aquifer characteristics, the causes of decline in the yield of tube-wells and to find out remedial causes thereto, systematic aquifer performance tests have been carried out in a set of tube-wells in the estate of Dunlop Rubber Factory at Sahaganj. Of the usual causes of declining yield and receding water-level the phenomenon of mutual interference between wells was found to be the chief factor for this gradual deterioration. The analyses of the data collected from the tests have suggested that tube-wells should be spaced 760 metres apart and a pumping rate of 1,37,000 l.p.h. per well should be followed so as to minimize the mutual interference of the performing wells and to maintain the economic level of pumping."

Mineral wealth

Though hardly possessed of any mineral resources, the plains of the district are nonetheless very useful because of their agricultural wealth. The rich alluvial clays provide an unlimited supply of raw material for the manufacture of bricks which are in ever-increasing demand due to the recent spurt in building activities as also for fashioning simple household utensils still very much in vogue in the countryside. Native mud, ductile and simple to handle, has been the stuff traditionally used for centuries for building the walls of rural huts. As already indicated, the clay-plains also store an immense reservoir of fresh sweet water.

Sands of the Paleocene and Lower Eocene periods contain petroleum and gas. These are overlain with limestone. As revealed by the Geological sections[20] only gas (but no liquid hydrocarbon) has been met so far in the Miocene beds down to depths below 8,000 feet (2,400 m.) and these reserves are associated with interbedded sands,* the composition of which does not appear to be constant, i.e. their distribution indicates a hiatus between them.† Lithofacies data from

* It is interesting to note that in the Yenangyaung province of Burma similar oil sands occur in the Oligocene-Miocene sequence (*vide* Pascoe—op. cit. p. [illegible]).

† Very interestingly, the distribution of the Durgapur beds of the Lower

the drilled wells reveal a basinward decrease in the sand content in the sediments of various formations. As sand decreases, lime increases basinward. The basal Pliocene beds associated with the Miocene-Pliocene unconformity have yielded 'some genuine shows of hydro-carbons.' However, so far as our knowledge goes, the exploration under the Indo-Stanvac Petroleum Project did not meet with any commercially exploitable gas or liquid resources. The structural traps with the best reserve-potentials were tested without any success. There had been some reason to be encouraged by the possibilities of stratigraphic entrapment but even these "did not reveal any commercial accumulation of either oil or gas."

From a study of the bore-hole at Chandernagore yet another mineral fuel, peat, representing the first stage in the transformation of vegetable matter into coal was found at a depth varying from about 20 to 30 feet (6 m. to 9 m.) and extending underneath a large area in the neighbouring countryside. This peaty layer has always been noticed at such a depth below the present surface as to be a few feet beneath the present mean tide level. In many of the cases observed, roots of *Sundri* trees were found in the peaty strata indicating that they were derived from decomposition of forest vegetation.[100] Even now bog soil or peat soil is in the process of formation in the very low swampy areas where the level of the groundwater is very near the surface or where the level fluctuates according to the seasonal rhythm of precipitation.

Sand quarries are found to occur at Paschim Krishnapur near Arambagh town, all along the banks of the Dwarakeswar from its confluence with the Silabati to that of the Mundeswari, along both banks of the Damodar near Pursura and Champadanga, at points where the old Benaras Road crosses the Mundeswari in the Pursura P.S., along the Tarakeswar branch railway line and the Kana Nadi at Baligari and Bagbari in Tarakeswar P.S., at Baladbandh, Brahman-para and Hamiragachhi in Haripal P.S., at Gopalnagar, Jamirberia, Purushottampur, Mallikpur, Ratanpur, Kamarkundu and Jalaghata in Singur P.S.,[101] at Ballabhpur in Serampore P.S., at Bansdarun, Uttar Dadpur and Dakshin Dadpur in Dadpur P.S., at Sudarsan, Ekbalpur and Kapastikri in Polba P.S., at Hoera, Chanparai and Raypur in Magra P.S., at Dakshin Gopalpur in Balagarh P.S. and at Boragari, Berela, Ilampur, Tinna, Mulati, Niala, Khanyan and Tanba in Pandua P.S. Most of these sand quarries are located along the deserted or decaying channels of the peninsular rivers and their exploitation is directly proportional to their market accessibility.

Earthquakes

The earliest recorded earthquake during the British period occurred on 6 September 1803. Other shocks were felt in 1811, 1842, 1853 and

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Miocene stage also 'indicates a hiatus between them' (*vide* Pascoe—op. cit. p. 1685).

1861. The severest tremor took place on 14 July 1885 when the semaphore tower at Niali fell down and on 12 June 1897 when a few houses were destroyed.[102] The next shocks were felt at Chandernagore, Rishra and Tarakeswar in April 1905 (Kangra earthquake), at Chinsura (where a roaring and whistling sound was heard) in September 1906 (Calcutta earthquake), at Chinsura, Serampore, Konnagar and Uttarpara in July 1918 (Srimangal or Assam earthquake), in the whole of the district in July 1930 (Dhubri earthquake), the more violent occurrences in January 1934 (Bihar-Nepal earthquake) and on 15 August 1950 (Assam earthquake). The last tremor was felt at Hooghly in April 1964 (Calcutta earthquake). These tremors and the enormous thickness of sediments prove that the floor of the Bengal basin is tectonically unstable and the deltaic region is undergoing subsidence.[103]

FLORA

The vegetation of the district has been shaped as much by human agencies as by climate and soil. Continued exploitation and maltreatment of flora have destroyed the forest concentrations of the district and have replaced them at places by scrubs, savanna grasslands, swamps and such biotic or bioedaphic growths as represent anything but climax stages.[104] Thus, urbanization, agriculture, pasturing, protection or destruction of trees, rearing of exotic plants etc. have caused important changes in the structure and composition of plant communities. The original climatic climax vegetation, such as the forests in the Arambagh subdivision, has long since become derelict.

Exotic plants

It is seldom realized that many of our common fruits and flowers of today were altogether unknown before the Portuguese came to this district. Good farmers at home, they had a knack to spot useful plants of other lands as also to acclimatize exotic flora in countries far from their native land. "Tobacco and potato came from North America. From Brazil they brought cashewnut (*Anacardium occidentale*), which goes by the name of *Hijli bādām* because it thrives so well in the sandy soil of the Hijli littoral. The cultivation of this valuable nut is limited to a narrow strip of the sea coast but the papaya (*Carica papaya*) and the pineapple have taken more kindly to the soil of Bengal and few are aware that they are aliens of comparatively recent domicile. We are indebted to the Portuguese for *Kāmrāngā* (*Averrhoa carambola*) which finds so much favour with our children. To this list may also be added *Payārā* (*Psydium guyava*), which found an appreciative poet in Monomohan Basu. The little *Krishnakali* (*Mirabilis jalapa*) that cheers our countryside with its yellow, red, and white is another gift of the once dreaded Feringi. This does not exhaust the list of plants that the Portuguese introduced in Bengal, but, incomplete as this inventory is, it fairly illustrates their zeal for the art and science of agri-horticulture."[105]

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The vegetation of Hooghly district presents an assemblage of ecological types such as mesophytic, hydrophytic and semi-xerophytic. The flora in the extreme north-west is to a large extent semi-xerophytic and more or less similar to those in drier districts like Birbhum. The characteristic species of roadsides and waste places in this part include some plants which are unknown or rare in other areas of the district, e.g. *Morinda citrifolia* (Indian Mulberry, *Ānch*), *Gnaphgalium pulvihatum*, *Mitrasacme alsinoides* (a small herb found in waste places), *Striga* (in French, *goutte de sang*) *asiatica*, *Leucas* (in German, *weissblume* or *weisshelm*) *mollissima*, *Dresera burmanni* (small insectivorous herb with glandular leaves resembling '*pānerpik*', its local name), *Cassia absus* (in French, *graines de chichim*), *Schizachyrium brevifolium*, *Iseilema laxum*, *Eragrosite coarctata* (love grass, a species very similar to *Kush*) etc. The vegetation on the north-west parts of the district is somewhat sparse, lacking both the large trees of the uplands and the luxuriant undergrowth of the lowlands.

In other areas of the district mesophytes and hydrophytes predominate and the flora is richest in waste places. Among the roadside trees, *Swietenia* (Mahogany), *Polyalthia* (Indian fir, i.e. *Debdāru*), *Sterculia* (*Jangli-bādām* or *Buddhanārikel*), *Putranjiva* (*Putranjib*), *Pongamiya* (*Karanjā*), *Pterospermum* (*Kanak-chāmpā*) and *Samanea* (rain tree) are common. Other trees growing wild are: *Ficus benghalensis* (Bengal fig, i.e. *Baṭ* or banyan), *Azadirachta diospyros* (Indian date plum; several species yielding beautiful ebony-like black wood are known as *Ābloos*, the rest *Gāub*), *Alstonia* (milk-wood, i.e. *Chhātim*), *Trewia* (*Piṭuli*), *Gelonium*, *Streblus* (*Saorhā*), *Trema* (charcoal tree, i.e. *Jibon*) etc. *Artocarpus* (jack fruit or *Kānṭāl*), *Mangifera* (mango, i.e. *Ām*), *Tamarindus Indica* (tamarind, i.e. *Tentul*), *Aegle marmelos* (wood-apple or *Bael*), *Spondias* (hog plum, i.e. *Āmrhā*), *Psidium Guyava* (guava or *Peyārā*) are commonly grown in villages for their fruits. *Michelia* (*Champā*), *Murraya exotica* (*Kāmini*), *Saraca Indica* (*Asok*), *Anthocephalus Cadamba* (*Kadam*), *Mimusops Elengi* (*Bakul*), *Nyctanthes* (*Siuli* or *Sephālikā*), *Gardenia* (*Gandharāj*) etc. are nurtured in gardens for their beautiful and fragrant flowers. Among the palms, *Borassus flabellifer* (Palmyra-palm, i.e. *Tāl*), *Cocos nucifera* (Coconut-palm, i.e. *Nārikel*) and *Phoenix sylvestris* (date-palm, i.e. *Khejur*) are fairly common throughout the district. Many other varieties of exotic palms are also grown in gardens for ornamental purposes. The roadside herbaceous vegetation consists mainly of *Cynodon dactylon* (*Durbā*), *Cyperus kyllingia* (reeds resembling grass and growing near streams; their split stems are used for making mats), *Cammelina benghalensis* (a small weed known as *Dholāpātā* or *Jātākānshirā*), *Amarantus gracilis* (*Naṭiā-sāg*), *Amarantus spinosus* (a prickly plant, i.e. *kānṭā-naṭe*), *Boerhavia diffusa*, *Heliotropium indicum* (*Hātisoonrh*), *Tridax procumbens* (in

French, *a cailles de Maurice*, i.e. *Tridaksha*), *Jatropha gossypifolia* (wild cassava, i.e. *Lāl-bharendā* or *Swayambarā*), *Cassia tora* (Casofee, i.e. *Chākundā*, the seeds of which are used as a substitute for coffee) etc.

The vegetation in waste places mainly consists of *Croton bonplandianum* ('match-me-not', resembling *Jāyphal* and producing a lac-like gum), *Crozophora plicate*, *Clerodendron viscosum*, *Lantana camara* ('Jamaica mountain sage', having the evil repute of causing malarial fever), *Aculeata*, *Glycosmis mauritiana* (in German, *Sussbaum*, very similar to *Ās-saorhā*), *Mikania cordata* (climbing hempwood resembling *Tārālatā*; the plant is considered to be a remedy for cholera and snake-bite), *Calotropis gigantea* (bow-string hemp, i.e. *Swet Ākanda*), *Argemone mexicana* (thistle oil plant, i.e. *Siālkānṭā*), *Xanthium strumarium* (clot weed, i.e. *Gagrā* or *Bichhāphal*), *Cleome viscosa* (wild mustard, i.e. *Holdey Hurhure*), *Gynandropsis gynandra* (bastard mustard producing caravello seeds, i.e. *Sādā Hurhure*), *Amorphophallus campanulatus* (Telinga potato, i.e. *Ol-kachu*), *Eupatorium odoratum* (Indian sage, resembling *Āyā-pān*).

In the *jheels*, ponds and marshy grounds including cultivated rice fields in the rainy season, various types of hydrophytes occur such as *Nymphaea* (water lilies, i.e. *Sālook*, *Sāplā*, *Raktakamal* and *Nilpadma*), *Nelumbium* (lotuses), *Ceratophyllum* (*Jhānji*), *Vallismeria* (*Pātā saolā*, *Pātājhānji*, *Baichā*), *Hydrilla* (*Jhangi Kurāli*), *Ottelia* (*Pāni Kāllā*), *Nymphoides* (*Pān Chuli*), *Eichhornia* (water hyacinth, i.e. *Kachuripānā*), *Pistia* (*Tokāpānā*), *Lemna* (*Pānā*) etc. Species of *Cyperus* (*Muthā*, *Mādurkāṭi*), *Scirpus* (*Paṭpaṭi*, *Kesur*), and *Typha* (bulrush, i.e. *Hoglā*) are the main amphibious plants growing in the reed swamps.

A number of exotic species are now naturalized in the district as wild plants, e.g. *Passiflora suberosa* (*Jhumkā-latā*, native of America), *Opuntia dillenii* (prickly pear, i.e. *Phani-monsā* or *Nāgphanā*, native of America), *Turnera ulmifolia* (native of America), *Bryophyllum calycinum* (*Pāthar-kuchi* or *Kop-pātā*, native of Moluccas), *Ageratum conyzoides* (*Dochunti*, native of America) etc.

Of the crops grown in the district some 50 are natives of India, four-fifths of which grow during the rains and the rest in winter. These consist of vegetables of various kinds, cereals, pulses, oilseeds etc. The common vegetables are potato or *Āloo* (*Solanum tuberosum*), brinjal or *Begoon* (*Solanum melongena*), gourd or *Bilāti-Kumrhā* (*Cucurbita maxina*), bottle gourd, i.e. *Lāu* or *Kadoo* (*Legenaria vulgaris*), plantain or *Kalā* (*Musa Sapientium*), cucumber, i.e. *Sasā* or *Khirā* (*Cucumis sativa*) etc. Radish or *Moolā* (*Raphanus sativus*), carrot or *Gājar* (*Daucus carrota*), tomato or *Bilāti-begoon* (*Lycopersicum esculentum*), cabbage or *Bāndhā-kapi*, Cauliflower or *Phul-kapi* (different varieties of *Brassica oleracea*) are common cold weather vegetables. Paddy or *Dhān* (*Oryza sativa*) and maize or *Bhuṭṭā* or

Makāi (*Zea Mays*) are important supplementary cereals raised for human consumption, while cultivation of other cereals is only of an occasional nature. *Moog* (*Phaseolus*), *Masur* (*Lens esculenta*), *Khesāri* (*Lathyrus sativus*), *Arhar* (*Cajanus indicus*) and *Chholā* (*Cicer arietinum*) are the usual pulses. *Arhar* is cultivated both as a field crop and as a hedge plant. Jute or *Pāṭ* (*Corchorus capsularis*) and *Mestāpāṭ* (*Hibiscus cannabinus*) are also cultivated exclusively.*

'orests: forest elts and areas overed

In Arambagh subdivision there is a Forest Range under the Burdwan Forest Division. Other parts of the district are excluded from the attention of the Forest Department. The Arambagh Range is divided into two forest beats, namely Chandur and Bhadur; the former has two sub-beats, Paradra and Babla, and the latter only one, Rangamati. The area of the Range is only 730.6 acres (295.8 hectares) of which 302.9 acres lie in Arambagh and the remaining 427.7 acres in Goghat P.S.† In Crawford's times, some 64 years ago, "on and near the banks of the Hooghli, in Balagarh *thana*, at the north-eastern corner of the district, there is a little jungle, consisting partly of forest trees, but much more of scrub and undergrowth. As a rule, much thicker and denser jungle will be found in the more rural parts of the riverside towns, than in any of the rural areas of the district, all of which are in a state of high cultivation, with the exception of a long strip a little to the west of the Damodar river. This strip extends across the whole breadth of Arambagh *thana* from north to south, being about fifteen miles in length in that direction (in Hugli district), and five to six miles in breadth. . . . The jungly strip begins from one to two miles west of the river. There is also a little jungle covering the ruins of Satgaon."[108] It appears that at the beginning of the present century there were more than 80

* This account is based mainly on a report received from the Director, Botanical Survey of India.

It might be of interest to note the following species which once flourished in the district but are almost extinct now: *Dhāk*, *Palās* and *Pipal* which breed *Coccus lacca*, the lac insect, (lac figured as one of the exports from Hooghly in 1657); *Ākh* (sugarcane), according to Crawford, appeared "to the eye of anyone touring in the district as by far the most important crop on the ground far more so than any of the *rabi* pulses or cereals;" *Pān* was largely grown in the Serampore subdivision: *Tisi* (linseed) was also extensively cultivated for the oil pressed from its seed and as a flax it figured as one of the exports of Hooghly in 1661; *San* (hemp) was once an important agricultural produce; *Nil* (indigo) was also widely grown and of this George Toynbee has given an interesting account in his *A Sketch of the Administration of the Hooghly District*. Besides these, mentionable species were (and some of them still are) *Supāri* (betelnut palm), *Penpe* (*Carica papaya*), *Sarifā* and *Ātā* (Custard apple), *Bātābi Nebu* or *Pomelo*, *Nebu* (*Citrus acida*), *Dālim* or pomegranate, *Lichi* (*Nephelium litchi*), Peach (*Amygdalis Persica*), *Kālojām* or blackberry, *Golābjām* or roseberry, pineapple or *Anāras* (*Ananas sativus*), *Tarmuz* or water-melon, *Tepāri* or Cape gooseberry, *Chāltā* (*Dillenia Indica*), *Simul* (Cottonwool), *Neem* (*Melia azadirachta*), *Sajinā* (*Moringa Pterygospermum*), *Bābul* (*Acacia Arabica*), *Siris* (*Albizzia Lebbek*), *Bokul* (*Mimusops Elengi*), *Jhāu* (*Casuarina Equisetifolia*), *Bāns* or Bamboo and *Aswatha* or *Pipal*. (*vide* D. G. Crawford—*Hugli Medical Gazetteer*, Calcutta, 1903, pp. 22-31).

† There is a proposal for planting another 223.24 acres, besides the existing forest lands which are partly acquired and partly vested.

square miles of forests in the district which have shrunk to a mere 1.14 square miles in 1966.

Broad effects of Government policy on the flora of the district

Before the promulgation of the West Bengal Private Forest Act, 1948, wanton exploitation and perfunctory management of forest resources, lack of fire protection, unrestricted grazing, soil erosion etc. were the rule. Deforested zones suffered heavily from soil erosion (mainly sheet erosion) and turned into vast waste lands. Since the abolition of the zemindary system in 1953-54, large tracts of forests have come under the direct management of the State and afforestation and other schemes to arrest soil erosion have been taken up. Today the district's forests are mostly the products of planned afforestation schemes. Indeed, the staff employed in the Arambagh Range, namely 1 Ranger, 3 Foresters or Deputy Rangers, 8 Forest Guards and 1 Minor have little else to do except planting trees on waste lands and checking soil erosion by digging contour trenches 15 feet apart with heaped-earth ridges running alongside them. Afforestation operations are based on a very close examination of local soil-plant relationship for obtaining the optimum results. To conserve rain-water and to retain the fertility of the soil, cattle-proof trenches are being dug wherever necessary. Since 1954 *Sāl* (*Shorea robusta*) has been introduced along with other valuable species such as *Cassia siamea*, *Salmalia malaberica*, *Alianthus excelsa*, *Mahuā* (*Bassia latifolia*), *Arjun* (*Terminalia Arjuna*) and *Sagoon* (*Tectona grandis*), all of which are rare in the district. The species commonly found in the existing forests are jackfruit, mango, guava, tamarind, teak, *Simul*, *Sonājhuri*, *Baṭ*, *Tāl*, *Khejur*, *Neem*, *Aswathwa*, *Sisu* etc.

Game laws and measures for the preservation of wild life

Shooting without licence is prohibited in the district and is punishable under the Indian Forest Act of 1927 and the West Bengal Wild Life Preservation Act of 1959 Whatever little wild life is available locally is hardly worth protecting and no special measures have been adopted for the same.[107]

FAUNA OR ZOOLOGY

Zoogeography* has yet to be a subject of active research in the Hooghly district. Palaeontological findings are so rare here that evolution of life, even in its bare outlines, can hardly be sketched. Since it is certain that the epicontinental sea covered portions of the district even after the Miocene period and that very marshy conditions prevailed in the late Pleistocene epoch, the discovery of marine shell fish (e.g. oyster) and other forms of life of estuarine and fresh water origin in and around the district may justly lead one to think that the district became habitable to land animals only in the late

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* According to Richard Hesse, zoogeography is the scientific study of animal life (including protozoans and vertebrates), their distribution and the mutual influence of environment and animals upon each other, vide *Ecological Animal Geography* by Richard Hesse. Chicago, 1949. pp. 1-2.

Pleistocene times. Ossified mammaliferous deposits of recent geological age are not rare in this region. In the Eocene and Oligocene periods this part of the country formed a fairly uniform and distinct zoogeographical province. These conditions, however, altered in the Miocene and Pliocene by the formation of landbridges across the Tethys* geosyncline (the present Himalayan region). Furthermore, climatic changes involving a drastic cooling also occurred which impoverished the warm-water fauna.[108] The epicontinental sea must have been moderately rich in marine life (plankton, algae and other animals) or the very existence of any oil or gas accumulation would have been improbable there.†

Zoological types which are vanishing

Wild life, especially of certain varieties, has been facing extinction since the last two centuries. In 1769-70 Stavorinus wrote that "tigers are very numerous in the woods and often sally out into the inhabited places" and that "there are likewise a vast number of wild buffaloes in the wood."‡ Writing in 1903, Crawford said that "leopards are fairly common in the north of the district, from Balagarh to Guptipara and occur elsewhere."[109] Tigers and wild buffaloes had ceased to exist by Crawford's time or even earlier in 1830 when a tiger was reported to have been seen for the last time amidst the ruins of Saptagram.[110]

In Hunter's time (1876) *Hilsā*, *Bheṭkı*, *Riṭā*, *Pāyrāchāndā*, *Muji*, *Phasā*, and *Pārse* were very common varieties of fish. Today all these have become rare and some of them extinct. The anadromous *Hilsā* (order, *Clupeiformes;* family herrings), in those times, used to travel long distances along the Bhagirathi in great shoals to reach their feeding grounds or to find safe places where they may lay their eggs. Like the salmon (which belongs to the same order) of the Pacific coast, the adult *Hilsā* has that strange instinct to return to the stream where they were hatched and to desert it if prevented from coming back. The wanton destruction of the *Hilsā*, very common these days, necessarily leads to their shunning the tidal rivers where they are caught in large numbers. There has not been any gainful attempt either on the part of the Government or of the fishermen to allow the *Hilsā* to reach the upper waters and thus keep the streams well-stocked with them.

Mammals

Today the mammalia of the district is rather poor both in number

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* Tethys, a geosynclinal sea of Mesozoic era, stretched between a northern continent which later became Eurasia and a southern continent, Gondwanaland, which subsequently split up into Africa, India and other southern land masses *vide* J. A. Steers—*The Unstable Earth*. Cambridge, 1950. pp. 109-201.

† Original richness of oil-forming materials is the key factor of any oil accumulation. However, other factors, namely impermeable cap rock to prevent leakage and a favourable geological structure to allow separation of oil from water, pressure etc., are also important for the formation of a commercially extractable and sizeable reserve.

‡ D. G. Crawford—*Hughli Medical Gazetteer*. Calcutta, 1903. p. 20. Quoting the same lines O'Malley and Chakravartti (op. cit. p. 20) added: "According to the *India Gazetteer*, four tigers were killed near Chinsura in 1784."

and in kind. Early in 1966 the Director of the Zoological Survey of India reported that "such a condition has been brought about by the continuously growing human population pressure and consequent destruction of forests for the purpose of agriculture. This has destroyed the places of concealment of animals and the exposed animals have been greatly persecuted by man." Of the wild mammals that still occur in the district, the largest is the wolf (*Nekre*) which is rather rare; but the jackal (*Siāl*) and the fox (*Khek-Siāl*) are common everywhere except in thickly populated areas. They are useful as destroyers of rodents and smaller vermin and more than repay the damage they do to poultry. Among the smaller species, the wild cat, the jungle cat (*Ban-birāl*) and the leopard cat (*Chitā-birāl*) are occasionally met with. They are very baneful to poultry. The common otter (aquatic, digitigrade and carnivorous) and the small clawed otter (*Bhondor*) are found in ponds, tanks and rivers and they consume a great deal of fish. The palm civet and the small Indian civet (*Khāṭās, Bhām, Gandhagokul*) are familiar malodorous quadrupeds which occasionally invade human habitations to feed on poultry and rats. They also eat fruits and thus play an important part in the dispersal of seeds. The small Indian mongoose and the Indian grey mongoose (*Neul*) are common around the villages. They prey on poultry and small livestock but compensate such damage by destroying rodents and vermins as also scorpions and venomous snakes. The common hare (*Khargos*), a swift and timid rodent, occurs in certain areas of cultivation. The rhesus macaque (*Lāl-Bāndar*) and langur (*Hanumān*) are seen in and around villages. They are serious pests to crops. The striped squirrel (*Kāṭhbirāl*), noted for its nimbleness in climbing trees, is found all over the district while porcupine (*Sujāru*), a rodent with spines, is occasionally met with. Of the rats and mice, the house mouse, the house rat, the bandicoot rat, which is as large as a small cat, and the field mouse are common. They inflict severe damage to crops whether in the fields or in granaries. Diseases like the bubonic plague, rat-bite fever etc. are also engendered by them. The house shrew (*Chhuncha*) is another common species. Several kinds of bats, all of which are vespertine and nocturnal, are also found. Of these the most prominent is the large fruit bat, popularly known as the 'flying fox' (*Bādur*) which help pollination but the benefit is largely offset by the enormous damage they cause to orchards. Indian false vampire, two species of *Pipistrellus* (*Chāmchikā*) and lesser yellow bats are also available. These insectivores play a useful role in the agricultural economy as a natural enemy of pests. The Gangetic dolphin (*Susuk*), a cetaceous animmal, is common in the Bhagirathi.

Avifauna

The birds occurring in this district may be divided into three broad groups: (*i*) game-birds, (*ii*) birds living near cultivated tracts and habitations and (*iii*) birds of special interest. Of the game-birds,

the dabchick (*Pāndubi*), a lobe-footed and almost tailless diving bird, frequents the *jheel* areas. The web-footed ducks and geese are mostly winter visitors. The bar-headed goose (*Rāj-hāns*), brahminy duck (*Chakhāchakhi*), pintail (*Dig-hāns*), common teal (*Bigri-hāns*), garganey (*Giriā*), red-crested pochard (*Lālsir*), white-eyed pochard (*Bhuti-hāns*) are found during the cold months. Cotton teal (*Bāli-hāns*) and comb-duck (*Nāki-hāns*) are, however, found throughout the year. The grey partridge (*Titir*) is common in some selected localities, while the grey and bush-quails, the Indian button-quails and the common bustard-quails (*Bater*), all allied to the partridge, are frequently found in scrub jungles. It is interesting to note that O'Malley said in 1912 that "partridges are not found in the district."[111] These migratory birds, esteemed as human food, may be a recent addition to the avifauna of Hooghly. In the marshy areas of the district, waders, i.e. the white-breasted water-fowl (*Dāhuk* or *Dāk pākhi*), the Indian moorhen (*Jal-Murgi*), the purple moorhen (*Kām-pākhi*), the coot (*Karandāb*), the bronze-winged jacana (*Jal-pipi*), the pheasant-tailed jacana (*Jal-mayur*), the stint and sand-piper (*Chāhā*), pintail and fantail snipes (*Kādakhochā*), and the painted snipe (*Rāj-chāhā*) are commonly met with. Among the pigeons, the Bengal, orange-breasted, imperial green pigeons (*Hariāl*) and the blue rock pigeon (*Pāerā*) are found around human habitations. At least two varieties of doves (*Ghughu*) occur in numbers.

Of the non-game birds the little cormorant (*Pān-kauri*) and the darter or snake bird (*Gayār*) are found near watery areas. The gluttonous and rapacious birds of prey, namely the vultures (*Sakun*), several varieties of eagles (*Sāpmār*, *Korāl*), hawks (*Bāj*), kites (*Chil*), harriers (a kind of swift hawk allied to the buzzard) and falcons (*Syen*), noted for their keen eyes, hooked beak, powerful claws and destructive power, deserve special mention. Various kinds of herons and egrets (*Bak*), ibises (*Kārhā-kol*), storks (*Janghil*, *Mānik-jor*, *Sāmukkhol*), stone curlews, lapwings (*Ṭiṭṭibh*), gulls, terns (*Gāṅg-chil*) constitute the common waders of the district. They have in common a short tail, long slender legs, a pointed beak and a craning neck. Cuckoos (*Bau-kathā-kao*, *Pāpiyā*, *Chātak*, *Kokil*, *Kuko*), parakeets (*Chandanā*, *Ṭiyā*, *Fulṭusi*), owls (*Lakshmi-pechā*, *Hutom-pechā*, *Kuture-pechā*), the brilliant-plumaged roller (*Nilkanṭha*), bee-eaters (*Bānspāti*), hoopoe (*Hudhud*), which is a South-European bird with rich plumage and a large erectile crest, hornbills (*Dhanesh*), swifts (*Bātāsi*, *Tālchoch*), woodpeckers (*Kāṭh-ṭhokrā*), larks (*Māṭh-charāi*, *Bharat*), the swift flying, long winged, fork-tailed, migratory swallows (*Ābābil*), wagtails (*Khanjan*), the lark-like pipits, minivets (*Sayāli*), cuckoo-shrike (*Kāsyā*), bulbuls, iora (*Faṭik-jal*), chloropsis (*Hārewā*), shrikes (*Karkaṭa*), noted for their strong hooked and toothed bill and a shrill voice, thrushes (*Doyel*, *Kālchuri*, *Dāmā*), loved as song birds, babblers (*Chhātāre*), tailor bird which sews

leaves together to form its nest (*Tuntuni*), paradise fly-catcher (*Fitā-bulbul*), the little grey tit (*Rāmgangā*), nuthatch (*Chorāpākhi*), Tickell's flower-pecker (*Fulchuki*), sunbirds—the smallest of Indian birds (*Durgā-tuntuni*), small munias, weaver birds (*Bābui*), house sparrow (*Charāi*), various mainas (*Sālik*, *Rām-sālik*, *Gooye-sālik*, *Gāng-sālik*, *Jangli-mainā*, *Harbolā*), the beautiful black and yellow plumaged orioles (*Bene-bau*), drongos (*Finge*, *Kesh-rāj*), crows (*Pāti-kāk*, *Dānrkāk*), and tree pie (*Hānrichāchā*) are common in the countryside.

Reptiles

Of snakes, *Typhlops porrectus*, *Typhlops braminus* (*Puiye*), *Typhlops diardi*, *Typhlops acutus*, *Python molurus* (*Ajagar*) which are very large, prefer wooded districts and can climb trees, *Ptyas mucosus*, *Coluber fasciolatus*, *Oligodon cyclurus*, *Ahaetulla ahaetulla*, *Lycodon jara*, *Lycodon aulicus* (*Heley*), *Sibynophis sagittarius*, *Natrix piscator*, *Natrix stolata*, *Xenochrophis cerasogater*, *Boiga trigonata*, *Psammophis condanarus*, *Dryophis mycterizans* (*Lāudagā*), *Dryophis nasutus*, *Enhydros plumbea*, *Enhydros enhydris*, *Cerberus rhynchops*, *Gerardia prevostiana*, *Bungarus caeruleus*, *Naja naja* (*Gokhro*), which can expand its head into a hood, *Naja tripudians* (*cobra* or *Keute*), *Vipera russelli* (*Chandraborā*), the usual length of which is five feet, and *Trimeresurus erythrurus* are the principal types found in the district. Besides these, the king-cobra (*Sankhachurh*) and the black-cobra (*Kālsāp*), both of which are deadly venomous, are found near marshy areas and on the separating embankments of paddy fields.

Gavialis gangeticus (*Mechcho-kumir* or *ghariāl*) and *Crocodilus palustris* (head long; teeth unequal; large horny scales reinforced by thick dermal bony plates especially on the back; without bony nasal septum and ventral armour) are the prevalent crocodilian species. Crawford wrote in 1903 that "both kinds of crocodile occur in the rivers, the *ghariāl* or long-nosed, and the snub-nosed crocodile, here known as *kumbhir*, but neither is common."[118]

Of lizards, *Hemidactylus brooke* (*Tiktiki*), *Hemidactylus flaviviridis*, *Gekko gecko* (the wall lizard), *Calotes versicolor* (*Girgiti*), *Mabuya macularia* (*Ānjani*), *Mabuya carinata*, *Riopa albopunctata*, *Varanus monitor* (*Go-sāp*), *Varanus flavescens* and *Varanus salvator* are most common. Of testudines *Geoelemys hamiltoni* (*Kachhap*), *Hardella thurgi*, *Kachuga kachuga*, *Batagur baska*, *Lissemys punctata*, *Trionyx gangeticus*, which is a fresh water turtle with neither bony nor horny scales, *Trionyx leithi* and *Trionyx hurum* are the principal types.

Amphibia

The *Rana cyanophlyctis* (*skipping frog*), the *Rana hexadactyla* (South Indian frog), the *Rana tigrina* (paddy-field frog), the *Microhyla ornata* (marshy toad) and the *Bufo melanostictus* (common Indian toad) are the principal vertebrata of the district intermediate between reptiles and fishes. The following varieties of fish are available in varying quantities: *Hilsa ilisha* (*Ilish*), *Gadusia chopra* (*Khairā*),

Notopterus chitala (*Chital*), *Notopterus notopterus* (*Pholui*), *Chela atpar*, *Chela laubuca*, *Oxygaster bacaila* (*Chelā*), *Barillius beudelisis*, *Barilius barila* (*Joiā*), *Barilius bola* (*Bholā*), *Barilius vagra* (*Koksā*), *Danio aequipinnatus* (*Chābli*), *Esomus daudvica*, *Rasbora daniconius* (*Dadhikā*), *Amblypharyngodon mola*, *Chagunius chagunio* (*Mowā*), *Tor putitora*, *Puntius conchonius* (*Tor*), *Puntius ticto* (*Titā-punṭi*), *Puntius ticto*, *Puntius sarana* (*Kurti*), the best-known Indian carp *Labeo rohita* (*Rahu* or *Rui*), *Catla catla* (*Kātlā*), *Cirrhina mrigala* (*Mirgel*), *Labeo boga*, *Labeo calbasu* (*Kursa* or *Kālbāus*), *Plotosus canius* (*Kāni māgur*), *Ompak bimaculatus* (*Pābdā*), *Ailia coila* (*Kājoli*), *Chupisoma garu* (*Garuā*), *Eutropiichtys-vacha* (*Bāchā*), *Pangasius pangasius* (*Pāngās*), *Heteropneustes fossilis* (*Singhi*), *Clarias batrechus* (*Māgur*), *Mystus aor* (*Ārh*), *Mystus cavasius* (*Ṭengrā*), *Mystus gulio* (*Nonā ṭengrā*), *Bagarius bagarius* (*Bāghā-ār*), *Xenetodon cancila* (*Kānkle* or *Kākhya*), *Aplocheilus panchax* (*Kānākuri*), *Channa orientalis* (*Chang*), *Channa marulius* (*Sāl*), *Channa punctatus*, *Sumbranchus bengalensis* (*Ṭāki*), *C. Reba* (*Kharke bāṭā*), *L. bata* (*Bhāngan bāṭā*), *A. mola* (*Mauralā*), *G. giuris* (*Bele*), *Ambassis nama* (*Chāndā*), *Anabas testudineus* (*Koi*), *Colisa fasciatas* (*Khalse*), *Paleomon* spp. (*Galdā*), *Metapenseus* spp. (shrimp), *O. punctatus* (*Laṭā*), *O. striatus* (*Sol*), *M. armatus* (*Bām*), *M. pancalus* (*Pānkāl*), *Amphipnous cuchia* (*Kuchey*), *Danio devario* (*Banspātā*) and *Polynemus paradiseus* (*Topse*). Besides, two exotic varieties, namely *T. mossambica* (*Tilāpiā*) and *Cyprinus carpio* (common carp) have been introduced in the district very recently.

Domestic animals

The domestic animals of the district consist of cows, bullocks, oxen, buffaloes, ponies, pigs, goats, sheep, dogs, ducks, fowls, pigeons, geese, turkey and guinea-fowls. The bovine species is being improved through artificial insemination all over the district except in Chanditala and Balagarh thanas where cows are serviced by Tharparker, Haryana and Sahiwal bulls. A detailed account of the measures taken for the betterment of livestock and poultry has been given in Chapter IV on Agriculture and Irrigation. In Crawford's time (1903) "great flocks of sheep" were fed and fattened for the Calcutta market in parts of the district, especially in the Pandua thana. This trade has long ceased to exist.

CLIMATE

Location of observatories

There is no meteorological observatory in the district. The following account is, therefore, based on the records of observatories in the neighbouring districts.[113] The rainfall data are, however, available from eight recording stations within the district for periods ranging from 30 to 92 years, i.e. between 1870 and 1962. The details of precipitation in these stations as also for the entire district have been given in a table appended to this chapter.

Proximity of the Bay of Bengal and the lie of the surrounding high lands are the chief determinants of the climate of the plains of West

Climatic divisions and seasons and their durations

Bengal and, as such, the climate of the district hardly differs from the overall humid mesothermal climatic pattern. According to Dr. S. B. Chatterjee, the district experiences a climate which is transitional between the CWg_3 and AW_1 types, where 'C' stands for "warm temperate rainy climates with mild winters," 'W' for "dry winter not compensated for by total rain in the rest of the year," 'g_3' for "eastern Ganges type of temperature trend, maximum before the summer rainy season" and 'AW_1' for "tropical savanna climates, hot in all seasons but moderately comfortable with only 10° to 20° F. annual range of temperature and 5% to 15% annual variability of precipitation."[114] The modified Gangetic monsoon climate of the district is characterized by moderate temperature (due to the nearness of the Bay) with cold weather means around 64°F. (18°C) and hot weather means between 80°F. and 85°F. (26°C to 28°C) only. This moderation is offset by oppressively high humidities nearly all the year round, especially from the middle of March till the end of October and well distributed but moderate rainfall during the monsoon approximating to the savanna climate. The cold season starts from about the middle of November and continues till the end of February. The period from March to May is summer. The south-west monsoon lasts from June to September while October and the first half of November constitute the post-monsoon season.

Seasonal growth of the air masses and winds

Weather and climate being a complex manifestation of air mass properties which change from season to season, an examination of the role played in the mechanism of the climate and weather of the district by the tropical air (with high dry-bulb temperatures), which is intermediate between the equatorial air mass (with high wet-bulb temperatures) and extra-tropical air mass (with low dry-bulb temperatures), is obviously necessary. During April and May a tropical maritime air mass overlain by a tropical continental air mass develops unstable weather conditions causing sudden thundersqualls, widespread heavy rain and high winds. These are the nor'westers, the Bengali equivalent of which is *Kālbaisākhi*. Heralding summer's advance, the tropical air mass gradually begins to play a dominating role, to be invaded subsequently by the equatorial maritime air mass coinciding with the onset of the monsoon. The grip of the homogeneous equatorial air mass produces low diurnal range of temperature, cloudy to completely overcast sky and frequent rain or drizzle. In May and throughout the monsoon season winds blow with gradually increasing velocity from directions between the south-east and south-west. During the post-monsoon season, i.e. between October and November, the tropical continental air mass in the process of transition to tropical maritime air mass brings about fair to fine weather and, except for early morning ground mists, visibility conditions are good. In October the winds are light and variable. During winter, i.e. from December to February the winds are mainly

northerly or north-westerly and the tropical continental air mass brings about clear or patchily clouded sky, invigorating light surface wind (occasionally gusty in the afternoons), fair visibility, warm day temperatures and fairly cool nights. When in March the weather is in a state of transition between winter and spring, welcome north winds start blowing in the mornings while the evenings are pleasant with the south breeze.

Temperature

The number of hot days in a year with the mercury rising beyond 37.8°C (100°F) is not many while the lowest temperature does not generally fall below 10°C (50°F). Temperatures rise rapidly from about the beginning of March. The day temperatures reach their maximum in April or May when the mean maximum temperature is about 36°C (96.8°F) and the mean minimum about 24°C (75.2°F). The heat in summer is oppressive due to the high moisture content of the air. The maximum temperature sometimes rises to 46°C or 47°C (114.8°F or 116.6°F). With the onset of the south-west monsoon by about the first week of June there is an appreciable drop in the day temperatures. But the night temperatures rise further as the heat received from the sun by insolation during longer days exceeds the amount lost by radiation during shorter and often clouded nights. With increased humidity and continuing high night temperatures, the weather during this period is often uncomfortable particularly when it is not raining. The monsoon withdraws early in October and the temperatures begin to fall, the drop in the night temperatures being more rapid from about the middle of November. January is the coldest month with the mean daily minimum temperatures ranging between 12°C and 13°C (53.6°F to 55.4°F) and the mean daily maximum around 25°C (77.0°F). In association with passing westerly disturbances, spells of bitterly cold weather are occasionally experienced when the minimum temperature may go down to as low as 4°C (39.2°F).

Humidity

The distribution of relative humidity is determined by the characteristic properties of prevailing winds. Relative humidities are generally high throughout the year, especially during spells of very wet weather with incessant rains; but with hot winds blowing, such as is common in the summer months, they are comparatively low, though more oppressive, especially in the afternoons when the humidity may be of the order of 30 per cent only. In winter, humidity decreases from south to north and east to west and on an average the variations in relative humidity are smaller than in summer.

Rainfall

Precipitation at the eight recording stations within the district indicate that though rainfall is adequate with about 50 to 100 rainy days in a year, there is enough variability—the mean annual frequency ranging from 901 mm. to 2,300 mm. in a period extending over 61 years (see table below) and the annual average variability from 5 to 15 per cent.[115] It will be seen from the same table[116]

that over a period of 40 years the annual rainfall in the district was between 1,201 mm. and 1,700 mm. (47.28" and 66.92"), that for 9 years it was less than 1,200 mm. and for 12 years it varied between 1,701 mm. and 2,300 mm. (66.96" and 90.55"). The average annual rainfall in the district, as deduced from these figures, is 1,520.1 mm. (59.84").

FREQUENCY OF ANNUAL RAINFALL*

Range in mm.	No. of years	Range in mm.	No. of years
901-1000	1	1601-1700	3
1001-1100	2	1701-1800	4
1101-1200	6	1801-1900	3
1201-1300	7	1901-2000	1
1301-1400	13	2001-2100	1
1401-1500	10	2101-2200	1
1501-1600	7	2201-2300	2

* Data based on figures from 1901 to 1962.

The rainfall during the Bay monsoon and the south-west monsoon amounts to about 72 per cent. of the total annual precipitation. The normal date (which, however, is liable to vary) of arrival of the monsoonal regime lies between the 5th and the 10th of June and that of its withdrawal between the 1st and the 15th of October.[117] August is the rainiest month. The regional variation of annual precipitation in the district is from 1,408.0 mm. (55.44") at Tentulia (Khanakul P.S.) to 1,778.1 mm. (70.01") at Chanditala. In the 50-year period between 1901 and 1950 the highest annual rainfall, amounting to 145 per cent. of the normal, occurred in 1941, while the lowest, being only 62 per cent. of the normal, was recorded in 1935 During the same 50 years, less than 80 per cent. of the normal rainfall occurred in 7 years, two of them being consecutive.

On an average the district experiences 75 rainy days (i.e. days with rainfall of 2.5 mm. or more) in a year. This number varies from 62 at Chanditala to 81 at Hooghly. Precipitation features indicate that the oceanic influences penetrate through the Bhagirathi channel. In fact, the trend of the isohyetal lines indicate that there is a constant juxtaposition of oceanic and continental winds over the district resulting in high or low local precipitation. The heaviest downpour in 24 hours recorded at any station in the district was 422.9 mm. (16.65") at Serampore on 21 September 1900.

Cloudiness

Skies are moderately clouded in May. The nor'westers are, however, associated with cumulus (the upper surface of which is dome-shaped and exhibits rounded protuberances like cauliflower heads, while the base is nearly horizontal) and cumulo-nimbus (which exhibit massive development of cumuliform summits that rise to 15,000 ft. (4,500 m.) or more above the base in the form of

mountains or towers, the upper parts having a fibrous texture and often spreading out in the shape of an anvil) clouds, the black and swollen masses of which come up from the west-northwest and hurtle across the skies with flashes of lightning and peals of thunder followed by a sharp shower. During the rainy season the skies are generally laden or overcast mainly with stratus (a uniform layer of low cloud resembling fog), strato-cumulus (patchy but regularly arranged cloud in low globular masses or puffed-out rolls of soft grey with dark patches) alto-stratus (a continuous fibrous veil of medium height, more or less grey or bluish in colour and sometimes so thick as to obscure completely the sun or the moon) and nimbo-stratus (a low amorphous rain-bearing layer of a dark grey colour and with a nearly uniform base) clouds. In August it occasionally rains for days together and the clouds bank up so heavily that it makes one pine for a gleam of sunlight. Cloudiness decreases gradually from October, when only stratus, strato-cumulus and alto-stratus clouds remain and in winter and spring the afternoon skies are lightly clouded. In January the skies are sometimes so clouded (due to the retreating north-east monsoon) as to make the days positively disagreeable in the cold weather.

Special weather phenomena: atmospheric pressure, storms etc.

In January when the more or less straight isothermal lines run from west to east, the atmospheric pressure increases roughly from south-east to north-west. By April both the isotherms and isobars change their positions; the isotherms assume somewhat symmetrical concave curves westward and temperature is found to increase in the western regions of the district along with the decrease of pressure in that direction. This is due to the development of a low pressure system in the north-western part of India.[118] Thunder-storms, occasionally associated with hail-storms, become common mostly in the afternoons because solar insolation reaching its maximum in the afternoons breaks the latent instability of the atmosphere and the energy thus released appears as thunder-squalls. Monsoon precipitation is also occasionally associated with thunder. Fogs occur during the cold season in rural areas and 'smog' in the industrial belt along the Bhagirathi in autumn, winter and spring, i.e. from October to March.

Storms and depressions from the Bay of Bengal often reach the district and its neighbourhood in May and in the post-monsoon season and cause widespread heavy rain with high winds. Tropical cyclones developing over the Bay are usually active at the end of summer when their onshore winds sometimes throw up the so-called tidal waves, 10 to 30 feet in height. On 7 October 1937 a 40-feet high tidal wave accompanied by a hurricane whirled up the mouth of the Bhagirathi causing much damage to life and property.[119] During typical monsoon months most of the storms having a gale force

originate in the north of the Bay and move west or north-west and the depressions bring about heavy rain. Though very infrequent, the turn of the monsoon is also a period of cyclonic activities. Copious precipitation during the rains is thus punctuated with nor'westers; pre-monsoon, monsoon and post-monsoon storms.

APPENDIX A

NORMALS AND EXTREMES OF RAINFALL

(In millimetres)

Recording Stations	No of years on which data are based		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Annual	Highest annual rainfall as % of normal and year**	Lowest annual rainfall as % of normal and year**	Heaviest rainfall in 24 hours* (amount & date)
Serampore	50	a	10.9	28.2	33.8	53.3	129.0	261.9	296.4	300.7	204.7	111.3	23.6	4.1	1457.9	162 (1946)	45 (1935)	422.9 (21.9.1900)
		b	0.9	2.1	2.2	3.4	6.8	12.6	15.6	16.1	11.5	5.3	1.1	0.3	77.9			
Hooghly	50	a	14.7	36.3	35.6	66.8	145.5	248.9	300.0	302.5	220.7	102.4	23.9	5.3	1502.6	143 (1933)	57 (1935)	246.4 (21.9.1900)
		b	1.1	2.2	2.2	4.2	7.6	12.2	16.0	16.6	11.8	5.9	1.3	0.3	81.4			
Arambagh	50	a	12.7	25.1	31.7	56.6	120.4	234.7	315.7	304.3	210.1	102.6	25.4	4.3	1443.6	147 (1926)	66 (1945)	317.5 (22.8.1885)
		b	1.1	2.1	2.1	3.9	6.8	11.9	15.5	16.2	11.4	5.2	1.2	0.3	77.7			
Chanditala	24	a	17.5	28.7	28.2	56.6	177.8	299.2	342.9	372.1	256.0	148.3	49.0	1.8	1778.1	208 (1941)	56 (1935)	259.8 (23.6.1933)
		b	0.8	1.3	1.3	2.3	5.5	10.2	13.1	13.5	9.1	4.0	1.1	0.2	62.4			
Tentulia	20	a	11.9	35.6	25.9	62.0	135.1	220.7	260.3	317.0	200.1	102.1	36.3	1.0	1408.0	141 (1941)	64 (1935)	188.2 (22.10.1945)
		b	0.7	2.2	1.7	4.2	7.1	12.1	16.9	16.7	11.0	4.6	1.2	0.2	78.6			
Boinchi	20	a	11.2	29.7	27.9	60.5	138.7	209.0	272.3	348.2	230.1	93.2	32.3	1.3	1454.4	142 (1939)	66 (1935)	214.6 (8.5.1949
		b	0.9	2.3	1.8	3.7	7.3	11.6	16 3	16.1	11.4	5.1	1.5	0.1	78.1			

NORMALS AND EXTREMES OF RAINFALL (*Contd.*)

(In millimetres)

Recording Stations	No. of years on which data are based		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug	Sep.	Oct.	Nov.	Dec.	Annual	Highest annual rainfall as % of normal and year**	Lowest annual rainfall as % of normal and year**	Heaviest rainfall in 24 hours* (amount & date)
Khanakul	20	a	11.9	41.7	21.6	43.9	162.1	265.2	357.1	378.5	211.6	118.6	33.0	3.3	1648.5	163 (1933)	70 (1935)	196.9 (15.8.1954)
		b	1.0	2.3	1.7	3.1	7.4	11.3	16.8	16.8	10.3	5.2	1.3	0.3	77.5			
Tarakeswar	20	a	12.9	20.8	26.4	69.9	139.9	218.4	284.7	332.0	207.8	117.1	35.6	2.3	1467.8	140 (1941)	65 (1932)	190.5 (16.10.1942)
		b	0.8	1.6	1.7	3.4	6.9	11.2	14.6	14.5	10.3	4.6	1.1	0.2	70.9			
Hooghly (Dist. Mean)		a	13.0	30.8	28.9	58.7	143.6	244.7	303.7	331.9	217.6	111.9	32.4	2.9	1520.1	145 (1941)	62 (1935)	
		b	0.9	2.0	1.8	3.5	6.9	11.6	15.6	15.8	10.9	5.0	1.2	0.2	75.4			

(a) Normal rainfall in mm.
(b) Average number of rainy days (days with rain of 2.5 mm. or more).
* Based on all available data up to 1955.
** Years given in brackets.

APPENDIX B

PARTICULARS OF D.V.C. IRRIGATION CANALS WITHIN HOOGHLY DISTRICT ON THE LEFT BANK OF THE DAMODAR[180]

Sl. No.	Name of Canal	Names of *mauzās* and police stations through which it passes in Hooghly district
1	Kana Damodar	Dighir, Ballabhipur, Srirampur, Sahabazar, Beguna, Nalthoba, Parambua, Chenchua and Sarampara (Dhaniakhali P.S.); Aknapur, Mirzapur, Monoharpur, Ballabhipur, Baidyapur, Basudevpur, Aligori, Tyagra, Joynagore, Shyampur, Kanjaban and Bhabanipur (Tarakeswar P.S.); and Chandinagore and Tara (Jangipara P.S.).
2	Kana Nadi	Khanpur, Maharampur, Dakshin Sankarpur, Kasipur, Madhusudanpur, Uttar Malikapur, Kamalpur, Rajipur, Salalpur, Byaspur, Dipa, Siti Palasi, Deulpara, Kabilpur, Dhamaitikari and Mitrapur (Dhaniakhali P.S.); Rambati, Kulut, Samserpur, Maheshpur (Tarakeswar P.S.); Sultanpur, Ajodhya Kasipur, Harishpur, Balia, Baladbandh, Basudevpur, Jamaibati, Gopinagore, Hara, Brahmanpara, Lalpur, Hamirgachhi, Khanakhanpur, Baganbati, Bandipur, Gazipur, Dakshinkul, Shapur, Baje Islampur, Islampur, Purba Gopinathpur, Hasimpur, Jadavbati, Bargachhia, Parjana, Kinkarbati, Purba Gopinathpur and Enayetpur (Haripal P.S.); and Madhya Hijli, Bhola, Kamarkunda, Gopalnagore and Daluigachhia (Singur P.S.).
3	Kana Nadi Distributary D/1	Jamdara, Paschim Gopinathpur, Dharampur, Paschim Kalikapur, Kumrul, Jiara (Dhaniakhali P.S.); Santoshpur, Teghari, Mohanbati, Kulteghari, Talpur, Laskarpur, Moktarpur, Taljore, Sachak, Paschim Ramnagore, Beremul, Binagram and Champadanga (Tarakeswar P.S.); and Sibchak, Morhal, Kaliara, Jamda, Rajbalhat, Rahimpur, Hariharpur, Soari, Rasidpur, Singhi, Khandakshetra, Paspur, Ranjapur (Jangipara P.S.).
4	Kausiki River	Ajodhyakashipur, Harishpur, Bahirkhanda, Jigra, Ichhapur, Kaikala, Baramba, Chautara, Krishnapur, Khamarchandi, Haripal, Chandinagore, Chak Chandinagore, Paschim Joykrishnapur, Chaitanyapur, Gosha, Paharpur, Gobati and Sipaigachhi (Haripal P.S.); and Bakcha, Kashipur, Hajipur, Chandpur, Purba Durgapur, Bhimpur, Ramnagore, Belpara, Rampara, Furfura (Jangipara P.S.).
5	Kana Damodar Distributary N/1	Kasipur, Hazipur, Hatkamalpur, Galgala, Pitha. Konan, Dhaniakhali, Harpur, Samaspur, Champabere, Hiranyabati, Chak Sultan, Talbona, Joyharipur, Akilpur, Kanuibanka, Ramchandrapur, Noapara, Bagnan, Parameswarpur, Hariharpur, Dakshin Malikapur, Purandarpur, Jotmahes and Porabazar (Dhaniakhali P.S.).
6	Kana Damodar Distributary N/1A	Bansipur, Chhota Malikapur, Madhusudanpur, Simla, Uttar Malikapur, Purba Banpur, Ghanasyampur, Jot Kamal, Purba Kalikapur and Gotpur (Dhaniakhali P.S.).
7	Kana Damodar Distributary N/2	Deulpara, Kabilpur, Durga Prasad, Chinagari, Bhandarhati, Mondara, Gangarampur, Gourpur (Dhaniakhali P.S.).

Sl. No.	Name of Canal	Names of *mauzās* and police stations through which it passes in Hooghly district
8	Kana Damodar Distributary N/2A	Bhandarhati, Mandara, Bajitpur and Nalitajol (Dhaniakhali P.S.); Nayanagar. Jinpur, Jejur, Mesera, Ankapara (Haripal P.S.); and Kankuria (Polba P.S).
9	Kana Nadi Distributary N/3	Daluigachha, Kismat Apurbapur, Burigaon, Balarambati, Baje Dhanyahana, Mirzapur, Bankipur, Jagat Nagar, Mamudpur, Srirampur Beraberi and Baruipara (Singur P.S.); Manirampur, Krishnarampur, Duttapur and Jagannathbati (Chanditala P.S.).
10	Kana Nadi Distributary N/3A	Balarambati, Mirzapur Bakipur, Sibrambati, Jagat Nagar and Dighaldanga (Singur P.S.).
11	Kana Nadi Distributary N/3B	Kismat Apurbapur, Jalaghata, Mirzapur Bakipur, Ghanasyampur, Paltagar (Singur P.S.).
12	Kana Nadi Distributary N/4	Gopalnagar, Babur Bheri, Dewan Bheri, Chak Gobinda (Singur P.S.).
13	Kana Nadi Distributary N/5	Gopalnagar, Khorda Apurbapur, Chak Gobinda, Gandar Pukur, Atisara and Ananda Nagar (Singur P.S.).
14	Kausiki Distributory K/1	Chak-Chandinagar, Abhirampur, Panrra, Kamalpur, Prasadpur, Anantapur, Jot Radhaballabh, Sripatipur (Haripal P.S.); Sheakhala, Paschim Tajpur, Aushbati, Chhunche and Masat (Chanditala P.S.).
15	Kausiki Distributary K/1A	Sheakhala, Patul Raghunathpur, Madhupur, Gopalpur, Krishnagar, Bandpur, Jiara, Bara Chowghara, Bade Sola, Haripur, Radhaballabhpur, Sadpur, Chhota Chowghara (Chanditala P.S.).
16	Kana Damodar Distributary D/2	Tara, Bamnagar, Anarbati, Rajpur, Arabindapur, Tarajol, Ajodhya, Akuti, Radhaballabhpur, Budul, Badal Hati, Paschim Durgapur. Chandi Nagar (Jangipara P.S.).
17	P.N.C. Gangur	Hazipur, Sripur, Tailkopa, Sadhat, Mallikpur, Boinchi, Chaubera, Panchgara, Pandua, Magura, Gutra, Somaragari, Jamgram, Balarampur (Pandua P.S.).
18	P.N.C. Gangur III	Thaipara, Sarai, Rukmini, Berui, Mandlai, Ilchhoba, Gazinadaspur, Chaklai and Mahadebpur (Pandua P.S.).
19	P.N.C Gangur IV	Benedanga, Radhanagar, Sibrai, Dakshin Dasdarun (Pandua P.S.); Hoera (Magra P.S.); and Malancha (Balagar P.S.).
20	Branch Canal No. 1	Boragari, Berela, Hatni, Basudebpur, Paira, Ramnagar, Gangoal, Gopalnagar, Alasin, Aima Nababpur, Bhuinapara, Beloon, Rosna, Rudrasanda, Paikara. Chhota Sarasa, Sankpur, Itachuna, Makhaldi (Pandua P.S.); Madhupur, Chanparai, Digsui (Magra P.S.).
21	No. 1 Branch Canal Distributary 1/3	Ramnagar, Talbona, Uttarkhanda, Goara, Champahati, Atti, Chautpur, Ranagari, Kalipukur, Matukpur, Daulatpur, Namajgram, Sripala, Kalisanda (Pandua P.S.).
22	No. 1 Branch Canal Distributary 1/4	Gangoal, Gopal Nagar, Alasin, Danpur, Chandpur, Prasadpur, Nrikelaanra, Jayer, Digha, Dwarbasini (Pandua P.S.); Meghaar, Sitala (Polba P.S.).

Sl. No.	Name of Canal	Names of *mauzās* and police stations through which it passes in Hooghly district
23	No. 1 Branch Canal Distributary 1/4A	Digha, Dwarbasini (Pandua P.S.); Danpur, Nagbal, Nabagram, Rasulpur, Khidirpur (Polba P.S.).
24	No. 1 Branch Canal Distributary 1/4B	Kunchpala, Dighanswar, Goswami Malipara, Popai, Talchinan, Sanihati, Beta (Polba P.S.).
25	No. 1 Branch Canal Distributary 1/5	Rosna, Mahanad Bejpara (Pandua P.S.); Harmala, Kotalpara, Patna Bhairabpur, Sudarsan Gaula, Goaljor, Paunan, Amnan, Arzi Jot, Chandi, Kaswara (Polba P.S.).
26	No. 1 Branch Canal Distributary 1/5A	Patna Bhairabpur, Kasundipara, Sangrampur, Polba, Belgare, Bhaturia, Gotu (Polba P.S.).
27	No. 1 Branch Canal Distributary 1/5B	Meria, Khein, Akna, Kasundiapara (Polba P.S.).
28	No. 2 Branch Canal Distributary 2/2	Purba Gopinathpur, Bhosla, Jolkul, Basipur, Uttar Abhirampur, Bhastara, Kantagaria, Purba Narayanpur, Uttar Basudebpur, Khajurdaha (Dhaniakhali P.S.); Sarkhola (Polba P.S.).
29	No. 2 Branch Canal Distributary 2/1	Bara Mallikpur, Satidaha, Gurap, Kansaripur, Cheragram, Pachhra, Bathangaria (Dhaniakhali P.S.).
30	K/1W/5 (along the Damodar Embankment)	Kamalpur, Prasadpur, Kulpai, Biprapur, Danga Maheshpur (Haripal P.S.).
31	K/1W/6 (along the Damodar Embankment)	Sripatipur (Haripal P.S.); Sheakhala, Paschim Tajpur, Banamalipur, Mosat (Chanditala P.S.).
32	Kana Damodar Distributary KD/22	Mujpur, Salepur, Dattapur, Chhaonapur, Aima Paharpur, Gangarambati, Timna (Tarakeswar P.S.).

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104 G. S. Puri—Indian Forest Ecology, Vol. I. New Delhi and Calcutta, 1960. pp. 31, 62-66.
105 Jadunath Sarkar—op. cit. p. 368.
106 D. G. Crawford—op. cit. pp. 2-3.
107 Note dated 21.6.66 from the Divisional Forest Officer, Burdwan.
108 Seven Ekman—Zoogeography of the Sea. London, 1953. p. 78.
109 D. G. Crawford—op. cit. p. 20.
110 loc. cit.
111 L. S. S. O'Malley & Monmohan Chakravarti—op. cit. p. 21.
112 D. G. Crawford—op. cit. p. 21.
113 Source : The Deputy Director-General of Observatories, Poona.
114 S. B. Chatterjee—Indian Climatology. Calcutta, 1953. pp. 283-96.
115 ibid. p. 296.
116 Source : The Deputy Director-General of Observatories, Poona.
117 S. B. Chatterji—op. cit. p. 222.
118 S. P. Chatterjee—Bengal in Maps. Calcutta, 1949. pp. 22-23.
119 G. B. Cressy—Asia's Lands and Peoples. London, 1955. p. 437.
120 Source : Executive Engineer, Lower Damodar Irrigation Division.

CHAPTER II

HISTORY

Pre-History and Proto-History

No pre-historic or proto-historic tools have so far been found in Hooghly district. Such a discovery seems improbable in the recent alluvial tracts between the Damodar and the Bhagirathi, due to constant deposit and piling up of river-borne silt which helps in quick decomposition of embedded materials. Other parts of the district, except some portions of the Goghat police station, have also been subject to frequent deltaic shifts. The Goghat thana has, in parts, a lateritic soil with bed-rocks at a much higher level than in the rest of the district. Geologically, this is the only area capable of yielding pre-historic tools, if at all.

Ancient Period

The earliest reference to this part of West Bengal is to be found in the *Āchārāngasutra*, the earliest of the Jain sacred books, compiled since about the 5th century B.C.[1] The text describes how Mahavira, the twentythird Tirthankara, travelled in Vajjabhumi, one of the two divisions of Laḍh country, the other part being Subbabhumi.[2] Laḍh has been convincingly identified with Rarh.[3] But from the description of the country given in the *Āchārāṅgasutra*, it seems it was a pathless wilderness with a lateritic soil[4] which does not correspond to a major part of Hooghly having a soil alluvial in character. A large area comprising the major parts of Birbhum, the whole of the Asansol subdivision of Burdwan, the Sadar subdivision of Bankura, the whole of Purulia, the north of the Sadar and Jhargram subdivisions of Midnapur and portions of Arambagh subdivision of Hooghly answer to that description. "Some scholars have identified it (Vajjabhumi) with the jungly part of western Rāḍha."[5] The name Vajrabhumi, 'land of diamonds' reminds one of Sarkar Mandaran of Abul Fazl's *Āin-i-Ākbari*, where there was a diamond mine at a place called Harpah.[6] The Sarkar corresponded to parts of modern Birbhum, Burdwan, Bankura, Purulia, Midnapur, Singbhum and Arambagh subdivision of Hooghly, the town of Mandaran being situated in the last-named area.[7] The land of diamonds may have extended as far as Kokhra on the borders of Bihar, which was famous for its diamond mines in the days of Emperor Jehangir.

In corroboration of *Āchārāṅgasutra*, *Kalpasutra*, another Jain text of great antiquity, asserts that Mahavira had also visited Subba-

bhumi. The *Bhagavatisutra* qualifies this claim by saying that Mahavira visited Sumbottora, which perhaps stands for northern Subba country.[8] "In the *Jaina Bhagavatisutra*, it is mentioned as one of the sixteen *janapadas* into which the country was divided at the time of Mahavira's birth."[9] Subbabhumi of the Jains is perhaps the same as Sumbha mentioned in a Buddhist *Jātaka* story where there was a town called Desaka. The Buddhist text of *Samyutta Nikāya*, of a much later date, also refers to the Sumbha country and its town Setaka or Sedak.[10] But reference to the country in early Buddhist or Hindu texts is far less than in Jain texts. Subbabhumi of the Jains has been identified with Suhma of the *Mahābhāshya* of Patanjali of the 2nd century B.C. According to the *Sabhāparva* of the *Mahābhārata*, which was compiled in the present form in the Gupta period, Suhma was the name of a people, who lived to the east of Magadha, south of Nepal, west of the river Lauhitya and on the sea-shore and were defeated by the Pandava hero Bhima. Suhmas were neighbouring people of the Pundras, the Tamraliptakas and the Vangas and were divided into Prasuhmas and Suhmas proper. Prasuhmas possibly lived in the western part of the Suhma country.[11] In the *Brihat-saṁhitā* of Varahamihira of the 6th century A.D., Suhma has been referred to as an eastern country.[12] The *Mārkandeya Purāna* of the same century corroborates the statement.[13] The 12th century work *Pavanadutam* by Dhoyi places Suhma on the bank of the Ganges. Suhma possibly included a large tract of land. Over the long period under review, its geographical connotation perhaps varied, assuming a socio-cultural entity at one time and a politico-administrative geographical connotation at another. Dandi, an author of the 6th century A.D., in his *Dasakumāracharita* included the city of Damalipta or Tamralipta within Suhma. According to Nilakantha, a commentator of the *Mahābhārata*, Suhma was co-extensive with Rarh. This might not be strictly correct, yet it gives an idea about the extensiveness of the Suhma country. "These details, to which attention is invited by several writers, point to the Tribeni-Saptagram-Pandua area in the Hooghly district as the heart of the Suhma country.[14] In partial modification of the above identification, Probodh Chandra Sen[15] suggested a new identification in a provocative article, which, however, failed to find favour with other historians.

Ceylonese chronicles

The Ceylonese chronicles *Dipavaṁsa* and *Mahāvaṁsa* credit a certain fugitive prince from India, Vijaya, with colonization of Singhala. His father Sihabahu ruled over the kingdom of Lala-ratthe from its capital Sihapur. About the place of origin of Vijaya, the *Mahāvaṁsa* mentions Magadha, Kalinga and Vanga in one group and Surparaka (or Soppara), Ujjain, Madra and Barukachchha (or Broach) in another, leading to difficulty in the identification of Lala-ratthe and Sihapur. E. Muller, following Burnouf, identified Lala with Rarh. Several other historians, following their lead, have

identified Sihapur with a place called Sinhalapatan near the modern village of Singur in Hooghly district[16] where several ancient mounds yield old bricks and sculptures from time to time. But scholars like Dr. S. K. Chatterji[17] do not think it wise to depend on the evidence of the *Mahāvamsa*. The *Dipavaṁsa*, an earlier text (4th or 5th century A.D.) which handles historical materials better and generally omits references to supernatural phenomena, refers only to the second group of countries prompting many scholars to think that Lala of the Ceylonese chronicles is the same as the Lata region of Gujaraṭ, which early Greek geographers like Ptolemy called Larike. Unless regular excavations are carried out in the mounds of Sinhalapatan, it cannot be definitely said that Lala-ratthe and Sihapur are identical with Rarh and Sinhalapatan respectively.

Greek and Latin sources

The veil of darkness that enshrouds the early history of Bengal is partially lifted in the latter half of the 4th century B.C. when a considerable portion of this part of the country formed a powerful kingdom which the contemporary Greek and Latin writers called Gangaridai or Gandaridai or Gangaritai, interpreted by classical scholars to mean "the people of the Ganges region." According to Curtius Rufus, Plutarch and Solonious, Gangaridai lay to the east of the Ganges near its confluence with the sea. But Pliny and Ptolemy inform us that all the tracts around the many mouths of the Ganges, including the Bhagirathi, were inhabited by people of Gangaridai. Writing about the political geography of eastern India, the famous Sicilian author Diodorous says that the people of Prasioi and their eastern neighbours the Gangaridai were united under one kingdom. To Curtius Rufus, the Gangaridae and Prasii were 'two nations', but he speaks only of one prince, king Agrammes (Ugrasena ?). Diodorous does not include the people known as the Tamalities, evidently the people of the kingdom of Tamralipta, within these two nations. All the writers, however, describe the military might of the joint nations in superlative terms. According to Arrian, another Greek geographer, Palimbothra or Palibothra, which has been identified with Pataliputra, was the greatest city of the joint nations of Prasii and Gangaridai. From all these accounts, Dr. B. C. Sen comes to the conclusion that the Agrammes or Xandrames, referred to by the Greek writers as the king of the nations of Prasioi and Gangaridai, was none other than Mahapadma Nanda of the Nanda dynasty of Magadha. According to Dr. Sen, the Greek geographers had confused Prasioi and Gangaridai as two nations under one king. In fact, it seems that in the face of Alexander's invasion these two kingdoms temporarily came together under one leader, for Pliny at one place obliquely suggests an alliance between Gangaridai and Kalinga in the expression '*Gangaridum-Calingarum*'. This might have been occasioned by an alarm caused by the growth of the military might of Magadha.[18]

It may be reasonably presumed that the tract now comprising the Hooghly district was included within the kingdom of Gangaridai. Some of the Greek writers, e.g. Ptolemy, mention the port city of Gange which was the seat of royal power of Gangaridai. The Periplus of the Erythraean Sea (1st century A.D.) states: "turning toward the east again, and sailing with the ocean to the right and shore remaining beyond to the left, Ganges comes into view, and near it the very last land toward the east. ...There is a river near it called the Ganges, ...On its bank is a market-town which has the same name as the river, Ganges. Through this place are brought malabathrum and Gangetic spikenard and pearls and muslins of the finest sort. ..."[19] Ptolemy stated that the Ganges had five mouths to the sea and he placed the city of Gange Regia on the east of the second mouth called Mega. Strabo referred to only one mouth and placed the city of Gange near it. There is considerable difficulty in identifying these mouths with the existing river system of deltaic Bengal due to cartographic inaccuracies of the Greeks and shifting courses of the rivers. Some have tried to identify Mega with the Bhagirathi while others with the Saraswati. From such premises, Saptagram on the Saraswati (in Hooghly district) has been supposed by some to be the same as the city of Gange. But there is hardly any archaeological, epigraphic or literary evidence to warrant such a conclusion.[20]

Whether the district was included in the Mauryan empire is difficult to say. The only evidence of Mauryan hegemony in Bengal is a 4th century B.C. inscription from Mahasthan (in Bogra district of East Pakistan)[21] but it is difficult to say whether Mahasthan's (or Pundranagara's) sway extended as far south as the Hooghly district. Hieun-Tsang is reported to have seen many Asokan stupas in Pundravardhana, Samatata, Karnasuvarna and Tamralipti towards the middle of the 7th century.[22] There is, however, no evidence to prove that he saw any of these within the limits of the present-day Hooghly district or that the latter was included within any of the aforesaid territorial divisions. Some are inclined to believe that when Samatata in the east, Karnasuvarna in the north, Pundravardhana in the north-east and Tamralipti in the south of the Hooghly district had been mentioned by Hieun-Tsang as the regions where he had seen Asokan stupas, the said district was included in the Mauryan empire. As, however, Megasthenes[23] does not mention anything in particular about the position of Gangaridai at the time of Chandragupta Maurya, it is difficult to presume that Gangaridai maintained an independent existence at the time of the early Maurya emperors.

"The establishment of the Gupta empire marks the end of the independent existence of the various states that flourished in Bengal at the beginning of the fourth century A.D. With the exception of Samatata, the rest of Bengal was definitely incorporated in the Gupta empire by the time of Samudragupta. ... Whether the subjugation

of Bengal took place during the reign of Samudragupta, or was accomplished wholly or even partly by his father, is difficult to decide. An inscription engraved on an iron pillar at Meherauli, . . .at Delhi, mentions, among other military exploits of a king called Chandra, that he 'extirpated in battle in Vanga countries his enemies who offered him a united resistance.' In absence of full details about this king Chandra, his identity is a matter of great uncertainty. . . .He has been identified, for example, both with Chandragupta I and Chandragupta II. In the former case we must hold that the father of Samudragupta had already added Vanga to Gupta empire. In the latter case, it must be presumed that Vanga had shaken off the yoke of the Gupta empire, and the son of Samudragupta had to reconquer the province by defeating the combination of the peoples or different states of Bengal.

"Evidence is not altogether lacking that Samudragupta himself carried his victorious arms to Bengal. For among the kings of Aryavarta who were, according to the Allahabad *Prasasti*, uprooted by Samudragupta, we find the name of Chandravarman who may be reasonably identified with the king of that name mentioned in the Susunia inscription as ruler of Pushkarana."[24] This Pushkarana has been identified with a village named Pakhanna, in Bankura district. "Chandravarman may thus be regarded as the king of Raḍha or the region immediately to its south. . . ."[25] The defeat of Chandravarman at the hands of Samudragupta possibly led to the inclusion of the present Hooghly district, which formed a part of Rarh, within the Gupta empire.

At the beginning of the 6th century, Rarh, which was included in the Vardhamana-*bhukti*, was administered by Vijaysena, a Governor of Vainyagupta (a scion of the Gupta dynasty) of Samatata. That Vardhamana formed a *bhukti* is also confirmed by the 6th century copper-plate grant of Gopachandra found in the village of Mallasarul in Galsi P.S. in Burdwan district. In all probability it comprised large tracts of Rarh, including the present Hooghly district or parts of it.[26] Besides, the village Mahanad within Polba P.S. has yielded from time to time gold coins issued by the Gupta emperors, pottery, stucco heads, terracotta figurines, fragmentary stone sculptures and terracotta matrix which on typological and stylistic grounds have been ascribed to the Gupta period.[27]

By the middle of the 6th century, Gupta power in Bengal was declining and feudatory chiefs and Governors of the Imperial Guptas were asserting their independence. One of them was Gopachandra of the Mallasarul grant whose Uparika or Governor of the Vardhamana-*bhukti* was one Vijayasena who was probably at the same post under Vainyagupta and continued in it under king Gopachandra. It seems from another copper-plate grant of Gopachandra found in the village of Kotalipara in Faridpur district (in East Pakistan) that

he had taken over Vainyagupta's territories which included eastern, southern and south-western Bengal. His line probably continued in Dharmaditya and Samacharadeva, whose inscriptions have been found from East Bengal. On grounds of geographical continuity of a kingdom, it may be reasonably assumed that Gopachandra's kingdom included at least the eastern, southern and northern, if not the western, parts of the present Hooghly district.[28] How this kingdom came to an end is not known. The reference to the sea in connexion with the Maukhari king Isanavarmana's conflict with the king of Gaur (Haraha inscription of A.D. 554), indicates that it took place in the southern part of western Bengal. In that case it may be assumed that by the latter half of the 6th century control over this part of Bengal had passed to the king of Gaur.[29]

Some time before A.D. 606 Sasanka became the king of Gaur with his capital at Karnasuvarna, now identified with Rangamati-Kansonapur, near the Chiruti railway station in Murshidabad district. "There is hardly any doubt that both Northern and Western Bengal were included in the domains of Sasanka. ... Whatever may be the extent of his rule in Bengal, Sasanka's dominions probably included Magadha from the very beginning."[30] From an inscription found in the village of Soro in Balasore district of Orissa, N. G. Majumdar has conclusively proved that Uttara Tosali, which was included within the Odra-*vishaya*, came within the empire of Sasanka Narendra.[31] A copper-plate inscription of land-grant found in Midnapur and now preserved in the Midnapur Sahitya Parishad records that "while Sasanka was ruling the earth his feudatory Samanta Maharaja Shri Somadatta was governing the province of Dandabhukti joined to Utkala-desha."* While all these tracts surrounding the present-day Hooghly district were included in Sasanka's empire, it may perhaps be presumed that his suzerainty also extended over the area now comprising the Hooghly district. But it cannot be ascertained who were the vassal chiefs in this region or to which *Vishaya*, *Bhukti* or *Mandala* it belonged.

Sasanka's empire broke up with his death. Hiuen-Tsang, who visited Bengal about A.D. 638 shortly after Sasanka's death, mentions, besides Kajangala (territory around Rajmahal), four kingdoms in Bengal proper, namely Pundravardhana, Karnasuvarna, Samatata and Tamralipti. The first two undoubtedly formed parts of Sasanka's empire and included the present-day districts of Burdwan, Birbhum, Murshidabad and Nadia. Whether Karnasuvarna included the whole or a part of Hooghly district after Sasanka's death is difficult to say. The political disintegration of the Gaur empire after the death of

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* Dandabhukti has been identified by scholars with the land "between Orissa and Bengal corresponding to the southern and south-western parts of Midnapur district. The name is said to have survived in modern Dantan in Midnapur district not far from the river Subarnarekha.": *Dacca History of Bengal*, Vol. I. p. 27.

Sasanka has been referred to in the Buddhist text *Ārya-Manjusri-Mulakalpa* which states: "after the death of Soma (Sasanka) the Gauḍa political system (Gauḍatantra) was reduced to mutual distrust, raised weapons and mutual jealousy—one king for a week; another for a month; then a republican constitution... ."[32] It is not possible to ascertain whether in such a state of flux the Hooghly area came under the sway of one or more chieftains or became a part of the neighbouring kingdom of Tamralipti, which, according to Hiuen-Tsang, became powerful.

The anarchical conditions prevailing in Bengal for more than a century came to an end about the middle of the 8th century with the election of Gopala by the *Prakritipunja* (the general populace) to end the state *Matsyanyaya* (the rule of force). Thus began the supremacy of the Palas, whose ancestral home was in Barendri in North Bengal. Even though the Monghyr copperplate of Devapala credits Gopala, the first king of the Pala dynasty, with extensive conquests, it is doubtful whether the whole or considerable portions of the present-day Hooghly district were included in his domain.

When Gopala's son Dharmapala was ruling Bengal, Sivakara I, the fourth king of the Bhauma-Kara dynasty of Utkala invaded and conquered the Rarh country for a while.[33] It may not be unreasonable to assume that the defeated Rarh prince was of the Sura dynasty of Apara-Mandara which was then on the ascendancy. Apara-Mandara has been identified with Bhitargarh or Garh Mandaran in the Goghat police station of the present Hooghly district.[34] Pala records do not mention of any confrontation of Dharmapala with any Utkala king. The Orissan records too show that Sivakara I did not have to face the Pala power in the process of his conquest of Rarh. It may, therefore, be deduced that the Pala empire did not then include certain parts of southern Rarh over which Shivakara held a short-lived suzerainty. Dharmapala's son Devapala, on becoming king, led victorious expeditions against Utkala and thoroughly subjugated that kingdom.[35]

Pala power did not survive for long after the death of Devapala. Utkala must have regained its independence soon after through the efforts of Suvakara III who appears to have established himself as a powerful monarch. His vassal Ranastambha, belonging to the Sulki family of Dhenkanal-Talcher region, is said to have extended his kingdom up to certain parts of the southern Rarh country.[36] The reign of Narayanapala, the fifth king of the Pala dynasty, witnessed a series of conflicts with the Rashtrakutas, the Kalachuris and the Chandellas. Dhanga, the Chandella king who ascended the throne some time before A.D. 954 and ruled till about A.D. 1000, was a contemporary of Gopala II, Vigrahapala II and Mahipala II. He is said to have conquered Rarh up to the Ganges and Anga. His Khajuraha inscriptions No. II and IV credit him with imprisoning

the queens of the falling monarchs.[37] Kalachuri inscriptions refer to two expeditions against Bengal led by two successive Kalachuri kings, Yuvaraja I and his son Lakshmanaraja, who probably ruled in the second and the third quarters of the 10th century respectively.[38] "Pala records definitely state that the paternal kingdom of the Palas had been possessed by a usurper before the end of the reign of Vigrahapala II or, in any case, shortly after it. It is generally held that this usurper belonged to the line of Kamboja chiefs who are known to have ruled about this time both in West and North Bengal."[39] The Irda copper plate of Nayapala Deva, issued from his capital city Priyangu in Vardhamana-*bhukti*, was possibly issued by a Kamboja and not a Pala king.

When Mahipala I succeeded his father Vigrahapala II around A.D. 988, the prospects of the Pala kingdom were very gloomy indeed. By heroic efforts he succeeded in recovering North and East Bengal within three years of his accession but there is no positive evidence to show that he also conquered the western and southern parts. On the contrary, the Tirumalai inscription of Rajendra Chola, who led expeditions against Bengal from about A.D. 1021 to 1023, shows that the king of southern Rarh whom he overthrew belonged to Sura and not Pala dynasty.[40]

There can be no doubt that Tandabutti, Takkanalarham, Uttiralarham and Vagala-desa mentioned in a Chola inscription to have been conquered by the Chola power, denote respectively Danda-bhukti, Dakshina-Rarh, Uttara-Rarh and Vangala. It has been reasonably inferred from this inscription that the Cholas attacked and overthrew Dharmapala (possibly a Kamboja king) of Danda-bhukti, Ranasura of the Sura family of Apara-Mandara (in present Hooghly district) and Govindachandra of Vangala, in that order, before they fought with Mahipala, the Pala king, and conquered Uttara-Rarh which means, by implication, that Danda-bhukti, Dakshin-Rarh and Vangala were either independent of Pala supremacy or were semi-independent kingdoms at the time of the Chola invasion.[41] Parts of the present Hooghly district were then included in the Apara-Mandara kingdom.

The Palas ruled the distant parts of their empire through local feudatory chiefs who began to assert their independence with the weakening of the Pala central authority. At this stage, the Hooghly area emerged into importance as a centre of power under the Sura kings of Apara-Mandara. Some doubt exists as to whether the Sura kings of Apara-Mandara were actually vassals of the Palas as also the exact time when they became independent rulers. In the *Kulaji* accounts of the Bengali Hindus, we find the name of one Adisura. "We have undoubted references to a Sura family ruling in western Bengal in the 11th century. Adisura may or may not be a historical person but it is wrong to assert dogmatically that he was a myth

and to reject the whole testimony of the *Kulajis* on that ground alone."[42] Whether or not Adisura was founder of the Sura dynasty, its first historic king was Ranasura, referred to in Rajendra Chola's inscription. Lakshmisura, another king of this family, is mentioned in the Sanskrit text *Rāmacharita* of Sandhyakaranandi which describes how the Pala king Ramapala lost his kingdom and regained it with the help of his vassals and allies. The detailed list of independent or semi-independent rulers given in *Rāmacharita* and annotated by a contemporary commentator is of great historical importance providing an interesting picture of the political dismemberment of Bengal caused by the decline of the Pala power.[43] The list includes, *inter alia*, the name of Lakshmisura, the ruler of Apara-Mandara and head of the group of "feudal chiefs of the forest." It is not certain whether his sway extended over the whole of the present-day Hooghly district; but it may be presumed that his kingdom covered Arambagh subdivision and territories further west which were then a forest tract.

Taking advantage of the weakness of Kumarapala, son of Ramapala, who ascended the throne in A.D. 1120, Anantavarman Choraganga of Orissa attacked Rarh some time before A.D. 1135. "The Kenduapatna, Panjabi Math and the Sankaranada Math copper-plate inscriptions reveal that Choraganga fought the King of Mandara on the bank of the Ganges and the Kalinga army destroyed the fortifications and the gateway of the city of Aramya, the capital of Mandara kingdom. The king of Mandara fled from the fort. There is no doubt about the fact that a large portion of southern Bengal remained under the king of Orissa."[44] One of the inscriptions of Choraganga mentions that "he exacted tributes from all the lands between the Ganga and the Gotamiganga (Godavari)."[45] Tradition in Hooghly district holds that he advanced up to Tribeni and built a ghat there on the Bhagirathi. From a copper-plate inscription of Vaidyadeva, the able minister of Kumarapala, it appears that Pala navy's successful campaign in the south probably stopped Choraganga's march beyond southern Rarh.

When the Senas came to be reckoned as the premier political authority in Bengal during the tenure of Vijayasena (A.D. 1095 or 1125-1157), they had already completed more than two generations' residence in the northern Rarh region. It is now generally assumed that the Karnataka-Kshatriya Sena family immigrated into Bengal when one of their ancestors took up service under the Palas. This ancestor, through his acumen and integrity, earned for himself and his family a principality where he began to rule as a vassal of the Pala sovereign. A feudal administrative set-up of this type, first introduced by the Palas, came to stay as a convention in Bengal.[46] Samantasena, the grandfather of Vijayasena, and his son Hemantasena, who has been described as a Maharajadhiraja in the inscriptions of his suc-

cessors, had the headquarters of their principality somewhere in Birbhum district,* the eastern boundaries of which possibly touched the Bhagirathi in the regions now in Murshidabad or Burdwan district. Taking advantage of the weakening of the Pala power under Kumarapala and his son Madanapala, Vijayasena, the third king of the family, led a number of successful expeditions against the loyal vassals of the Palas, other neighbouring kings and against the Palas themselves and eventually captured the sovereign power in Bengal. The Deopara inscription records the names of kings over whom Vijayasena scored victories; there are several other inscriptions which help us to infer about the friends and allies of the Senas. The Barrackpur copper-plate inscription for instance records that Vijayasena married one Vilasadevi, a princess of the Sura family, which was then ruling over southern Rarh, thereby cementing an alliance with Apara-Mandara. Whether Vijayasena extended his direct administration over all the tracts he conquered or left some of it to local feudatory chiefs, is not definitely known. His relation with the Suras, who had been ruling over considerable portions of the present-day Hooghly district and adjoining areas is also a matter of conjecture.

The Naihati copper-plate inscription of Vallalasena, found in the village of Naihati in Katwa subdivision of Burdwan district, reveals that Vardhamana-*bhukti* was an important division of the Sena kingdom. The Govindapur grant of Lakshmanasena, found in the village of Govindapur in the district of 24-Parganas, informs us that Vardhamana-*bhukti* extended up to the confluence of the Ganges (Bhagirathi) with the sea and was divided into *chaturakas* of which *Vetadda-chaturaka*, identified with Betor in Howrah district, was in the Paschim Khattika of Vardhamana-*bhukti*.[47] It is possible that *Vetadda-chaturaka* included southern portions of the present-day Hooghly district Other portions, especially northern and western, might have been included in other *chaturakas* or *vithis* within the Vardhamana-*bhukti*.

The Senas had their territories divided into the administrative tiers of *vishayas*, *bhuktis*, *mandalas* and *vithis* or *chaturakas*. Under them Vardhamana was an important *bhukti* comprising several *mandalas* including Uttara-Rarh *mandala* and possibly Dakshina-Rarh *mandala*. In *Vallālacharita*, there is a list of territories comprising the kingdom of Vallalasena (A.D. 1158-1179), which included Vanga, Rarh (presumably, Uttar-Rarh, Dakshin Rarh and Paschim Khattika), Barendri, Mithila and Bagri (the Bagri pargana of Midnapur district).

There seems to be little doubt that Lakshmanasena (A.D. 1179-

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* In Paikar (or Paikor), in Muraroi P.S. of Birbhum district, under a banyan tree, near the high school, there are a few pieces of stone of historical importance. One of these contains the name of Raja Vijayasena. (Census, 1951: District Handbook: Birbhum. Calcutta, 1954. p. 149).

1205) ruled over the entire tract now forming the Hooghly district. He not only retained the kingdom left to him by his father but extended it to the west and south-west. Dhoyi, the court poet of Lakshmanasena, mentions in his *Pavanadutam* that Vijaypur, the capital of Lakshmanasena, was on the Bhagirathi. Since then the river has changed its course many times making exact identification of the location of the city difficult. Some say it was Nabadwip in Nadia district while others hold it was Saptagram in Hooghly.

Saptagram, Tribeni and Mahanad in Hooghly district have yielded many stone sculptures and remains of old buildings, typologically and stylistically datable to the Pala and Sena periods when, according to early Muslim historians, these places were important seats of feudal power. But there is not much of concrete evidence to explain the actual relationship of these principalities with the sovereign Pala and Sena powers. Probably, they were vassal kingdoms.

With the flight of Lakshmanasena to East Bengal in A.D. 1201, the sovereign power in Bengal passed over to the invading Turko-Afghans. But it took nearly a hundred years for the invaders to finally annex the territory now included in Hooghly district. During this interregnum the feudatory chiefs of Saptagram, Tribeni, Mahanad, Furfura and Arambagh enjoyed their own measure of independence.

MEDIEVAL PERIOD

The invasion of Bengal by Muhammad Bakhtyar Khilji took place in A.D. 1201. About this portentous event in the history of Bengal, Jadunath Sarkar observed: "The Muslim conquest of Bengal in the beginning of the thirteenth century was but a phase of the Turanian *Volkerwanderung*, which had begun with the migration of the Kara-Khitai horde from the borders of Mongolia in a south-westerly direction and the resultant dislodgment of the nomadic tribes of the Trans-Oxus region in the second half of the twelfth century A.D. ... The tide of migration of the nomads swelled by the more adventurous elements in the countries through which they moved, took its destined course to the east of the Indus, and permanently affected the political destiny of India by giving the character of colonisation to the Muslim conquest of Northern India in the thirteenth century. Its first rush did not stop till Muhammad Bakhtyar Khilji carried the victorious banner of Islam further into South Bihar, and soon after planted it triumphantly on the banks of the Bhagirathi and the Karatoya."[48]

Muhammad Bakhtyar Khilji, a Turk belonging to the Khilji or Khalji tribe, came to Delhi to the court of Malik Qutbuddin Aibak and then moved east to Badayun and served under Malik Hizbaruddin, the *Sipāh-sālār*. About A.D. 1197 he repaired to Oudh and obtained from the local governor two parganas as *jāgīr* in the south-eastern corner of the modern Mirzapur district. Having

entrenched himself at this base, he began to organize campaigns to the east, the main purpose of which was loot. Probably in A.D. 1199 he captured and sacked the rich Buddhist monastery in Bihar known as Odantapura-vihara. He spent the following year in consolidating his conquests in south Bihar and in 1201 marched his cavalry into Bengal *via* Jharkhand avoiding the usual route by Teliagarhi near Rajmahal. With a handful of his personal guards Muhammad Bakhtyar Khilji rode so fast that he managed to outstrip his main army and having reached Nadia, where Lakshmanasena was staying at the time, gave himself out as the leader of a merchant caravan from Seistan. He proceeded with his contingent to the palace gate and attacked the guards all on a sudden, forcing entry into the citadel. The main body of the cavalry then came up and joined the vanguard. Lakshmanasena barely managed to escape with his life and fled to East Bengal where he continued to rule for some years. "A variant of the same story is given by Isami, the author of the *Futuh-us-salātin*, a metrical history of India, written less than a century after the *Tabāqat-i-Nasiri*... ."[49]

The victor, however, did not remain to occupy the Rarh region permanently. Nor did he set out in pursuit of Lakshmanasena into East Bengal. He concentrated his attention instead on the subjugation of the city of Gaur and completed the conquest of Varendra territory by about 1203. The next two years were taken up in reducing the newly annexed domains very much in the fashion of contemporary conquerors by pulling down idol-temples and building mosques on their ruins, endowing *mādrāsās* to encourage Muslim learning and organizing campaigns for the conversion of local inhabitants to Islam. But, as Jadunath Sarkar points out, "he was not blood-thirsty and took no delight in massacre or inflicting misery on his subjects. The problems of internal administration and the conciliation of his military chiefs were together solved by the establishment of a sort of feudal government in the country."[50]

Four years after his celebrated and successful Bengal campaign, Bakhtyar and his men were on the war-path again. "Shortly before his Tibet expedition he sent Muhammad Sheran and his brother Ahmad Sheran of his own tribe in command of an army towards Lakhnor (Nagar in the Birbhum district), and Jajnagar (kingdom of Orissa). This was intended to keep the Hindus south of the Ganges busy, and perhaps to annex the Raḍh region permanently."[51]

Following the disastrous failure of his Tibet expedition, Muhammad Bakhtyar Khilji died in A.D. 1206. As no written chronicle exists giving the actual extent of the principality of Lakhanawati founded by him, Jadunath Sarkar's reconstruction of its boundaries may be quoted at some length. "We have no coins or inscriptions of Muhammad Baktyar's time to spread on a modern map, and give the reader an idea of the geography of the Khilji

dominion at his death. Some pioneers (Monmohan Chakravarti, *JASB*. New Series. IV. 153; Banerji, *Bāngālār Itihās*, II. 1st edition, 7-9) *in the re-construction of the history of Bengal have been rather persistent in under-estimating the extent and importance of Muhammad Bakhtyar's achievements, which were in their opinion 'mere plundering raids' magnified into conquests by the later historians. They are inclined to confine the Muslim possessions in Bengal* to the narrow stretches of the river Mahananda and the Punarbhava, though facts unchallenged by them prove with approximate certainty that the principality of Lakhnawati was at this time much larger—roughly bounded on the north by a north-easterly straight line from the modern town of Purnea *via* Devkot to the town of Rangpur; on the east and the south-east by the Tista and the Karatoya; on the south by the main stream of the Ganges; and on the west by the lower course of the Kosi and from its mouth across the Ganges to the Rajmahal hills. And within this limit Muhammad Bakhtyar firmly held, besides *Sarkar* Lakhnauti, the major portion of the *mahals* of each of the six other *Sarkars*, Tanda, Purnea, Pinjrah, Tajpur, Ghoraghat and Barbakabad of Todarmal's rent-roll of the Subah of Bengal."[52] All this would indicate that the southern Rarh tract remained outside Muhammad Bakhtyar's control. This conclusion is also borne out by some events that took place a few years later, during the reign of Sultan Ghyasuddin Iwaz Khilji (1213-1227). Vishnu, the renowned and warlike general of Ganga Emperor Anangabhima III (1211-1238), invaded the Rarh tract "which had been a sort of no man's land though the Muslim rulers of Lakhnawati claimed Lakhnor in Birbhum as their frontier."[53] "At any rate that frontier post was seized by Vishnu who had carved out a frontier-march for himself, south of Raḍh, having perhaps Jajpur (Jajnagar) on the Vaitarani river as the seat of his power."[54]

Some time in A.D. 1214 Sultan Ghyasuddin Iwaz Khilji set out on an expedition to recover Lakhnor. The campaign was a protracted one and the Chhatesvara inscription, quoted by Jadunath Sarkar, claimed success for the Orissan general, Vishnu.[55] Jadunath Sarkar mentions in a foot-note: "I follow Rai Bahadur Monomohan Chakravarti who gives the date of the Chhatesvara inscription as c. 1220 A.D., and ascribes the success described in this inscription as referring to the reign of Anangabhima III of Orissa. Minhaj indirectly corroborates to a certain extent the testimony of Chhatesvara inscription by a clear hint that Lakhnor had slipped out of the hands of the Muslims before Iwaz cleared it for himself and appointed his own officers there."[56] However, the Orissan army had to withdraw eventually to their own frontiers. "Sultan Ghyasuddin not only restored the prestige of Muslim arms by rolling back the tide of Ganga imperialism but also advanced his southern frontier from the bank of the Ajay river to that of the Damodar and the borders of Vishnu-

pur. It is said that even the ruler of Jajnagar paid tribute to the Sultan, which however cannot be true of the great King Anangabhima III of the Ganga dynasty; Vishnu, the Jajpur feudatory of Anangabhima, might have sought to make peace with the Sultan of Laknnawati by offering presents as the Muslim army must have reached this time even south of the Damodar river as far as Katasin, the next frontier outpost mentioned by *Minhaj-i-Siraj*."[57] All this, however, does not make it quite clear what the position of the Saptagram principality was at this time. Possibly, it continued to belong to the "no man's land," mentioned by Jadunath Sarkar, with some local Hindu chieftain ruling over it.

In any case, the next specific reference about this territory is to be had some thirty years later, around A.D. 1243, when the armies of Orissa invaded western Bengal once again and succeeded in overrunning the whole of the Rarh country. In the dry season of the year 641 A. H. (i.e. October-November A.D. 1243), when Narasimhadeva I, the son of Anangabhima III, was on the Orissan throne, the ruler of Jajnagar, according to *Minhaj-i-Siraj*, started 'molesting' the territory of Lakhnawati. In the campaigning season of 1242, he seems to have taken advantage of the withdrawal of the army and the fleet of Tughral Tughan Khan (his tenure at Lakhnawati lasted from A.D. 1236 to 1245), who had led an expedition to Kara to test his strength against the power of Oudh, and catching the Bengal army unprepared, led an expedition into Rarh and ultimately pushed on to the frontiers of Vanga. The Orissan Chief "avoided rousing the suspicions of the Turks of Southern Raḍh, strongly posted in Nagar in the Birbhum district, and sought easier conquests east of the river Bhagirathi. This tract might have been occasionally raided during the period of the Khilji ascendency, but no Muslim army had visited it after the death of Sultan Ghyasuddin Khilji (1227 A.D.) Saptagram (Satgaon) was still unsubdued and the district of Nadia was strewn with semi-independent Hindu Rajas. These were little likely to offer any opposition to the northward expansion of the mighty Hindu power of Orissa which was their only safeguard against the rapacity of the Turks. Tughral Tughan slept over this dangerous aggression of Orissa on his immediate frontier till the emboldened enemy actually began ravaging his own possession on the Lakhnor side in the dry season of 1243. . . . The army of Tughral Tughan marched along the broad highway of 'Iwaz as far as Lakhnor, and pushed further south-east after having crossed the rivers Ajay and Damodar. The army of Orissa retreated without fighting to their frontier fortress of Katasin, in a region full of jungle and canebushes suited for ambush and surprise. Tughan's objective was perhaps some fort north of Vishnupur in the Bankura District."[58] On In April A.D. 1244, the Turks delivered an assault on the fort of Katasin but were beaten back. Tughan Khan fled and managed to

save his life. He appealed for help to the Sultan of Delhi, Alauddin Masud Shah, who ordered the Governors of Kara-Manikpur and Oudh to unite their forces and come to the rescue of Tughan Khan. Narasimhadeva invaded Bengal again and sacked Lakhnor, the capital city of Rarh. Tughan Khan was defeated and Lakhnor was plundered. The rule of the Turks was thus terminated in Rarh and Varendra was invaded the next year.

In A.D. 1253 the Rarh country again became the scene of warfare during the reign of Sultan Mughisuddin Yuzbak, the Governor in Bengal of the Imperial Sultan Ghiyasuddin Balban. According to *Minhaj-i-Siraj*, the characteristics of the new Governor were "rashness and imperiousness," although he was undoubtedly an able soldier and a successful ruler.[59] After having consolidated his authority in Varendra, he led an expedition to Rarh some time in November-December 1253. About this time a powerful chief of Orissa, who was the son-in-law and vassal of King Narasimhadeva I, had established a strong feudatory kingdom in Bengal with its capital at Madaran (Mandaran), now in the district of Hooghly, a few miles west of the present town of Arambagh. Mughisuddin Yuzbak fought three battles during this campaign but was defeated by the Orissan chief with heavy losses. An appeal for help to the Imperial Court at Delhi proved to be of no avail. However, Mughisuddin Yuzbak reorganized his own army and two years later in November-December 1255, he attacked Rarh once again. This time he was more successful and by a well-planned assault captured Madaran. He then turned his arms to reducing the whole of Rarh and annexing the kingdom of Lakhnawati. With an achievement so exalted, he rebelled against the Imperial Sultan of Delhi and declared himself an independent Sultan of Bengal, assuming the title of *Sultan Mughis al-duniya waal-din Abul Muzaffar Yuzbak al-Sultan.*[60] Sultan Mughisuddin Thughral ruled from A.D. 1268 to 1281 and carried out plundering raids into the territory of Jajnagar which, at the time, not only consisted of parts of modern Orissa but almost certainly large portions of western Bengal, i.e. parts of Birbhum, Baukura, Burdwan, Hooghly and Midnapur districts of the present day.

At the end of the 13th century, Bengal comprised four large Governorships—Bihar, Saptagram, Bang and Devkot—which seems to indicate that Orissan suzerainty, at least over a large part of the modern Hooghly district, must have had come to an end by that time. The position of the fort of Mandaran was somewhat peculiar as it changed hands a number of times. But by the end of the 13th century the country around Mandaran came under the more or less permanent control of the Sultanate of Bengal.

"The History of the Muslim principality of Lakhnawati emerges at the close of this period as the history of Bengal proper with its well-defined divisions, Lakhnawati, Satgaon, Sonargaon and

Chatgaon (Chittagong)."[61] With the consolidation of Turkish rule in Bengal there was a large influx of the warlike Turks from northern India into Bengal and along with them also came the *Ghāzis* and *Āwliyās* of Islam who were to play an increasingly important role in the history of this region henceforth. Some historians have tried to explain this incursion in terms of a definite intention on the part of the Delhi Sultanate to reconquer and annex Bengal to its dominions. But this view has not been supported by Jadunath Sarkar.

With the appointment of Bughra Khan as the Governor of Lakhnawati by his father Sultan Balban, commenced one of the most notable periods in the history of Muslim expansion in Bengal. A recent work on the social history of the Muslims in Bengal cites the contemporary historian Barani as having written: "And he (Ghiyasuddin Balban) called him (Bughra Khan) before his presence in private and made him swear that he (Bughra Khan) should not have convivial assembly, nor drink, nor engage himself in pastime, before conquering the Iqlim of Bangalah and taking it into his direct control."[62] This is clear enough indication that the Muslim rulers of the period followed a definite and conscious policy of expansion in Bengal. We find that during the reign of Bughra Khan's son Ruqnuddin Kaikaus (A.D. 1291-1301), his general, Zafar Khan Ghazi, launched an armed expedition against Saptagram and Tribeni, both within the modern district of Hooghly. It can be said with certainty that this region came under the permanent occupation of the Sultans of Bengal about that time. "By 698 H. (1298 A.D.), however, the northern part of the (Hooghly) district had passed into the hands of the Muhammadan conquerors; for Zafar Khan's mosque at Tribeni bears that date, and his Madrasa is dated few years later. Tribeni, and afterwards Satgaon (Sanskrit Saptagram) was the head-quarters of the local Muhammadan governors; and the importance of the latter place was recognized by its being made a mint-town: the earliest existing coin minted at Satgaon is dated 729 H. (1329 A.D.)."[63]

Jadunath Sarkar cites a contemporary Arabic inscription in this connexion. "An Arabic inscription of another Zafar Khan (Tribeni, Satganw; dated 698 A.H.) tells us that 'in the region of *Sultan-us-salatin* Kaikaus . . . whose government has revived the memory of all the assemblies of Jamshed's time, . . . Zafar Khan, the lion of lions . . . ' built a Madrasa to propagate Islamic learning in the Satganw territory. which like the Sonarganw region was in the process of conquest and annexation during this time."[64] During the reign of the next ruler of Lakhnawati, Sultan Shamsuddin Firuz Shah (A.D. 1301-1322), another *mādrāsā* was built at Tribeni. Jadunath Sarkar has attempted a reconstruction of the history of Saptagram during this period which it would be worthwhile to quote at some length. "A third inscription of Firuz Shah of Bengal in Zafar Khan's tomb

at Tribeni dated 713 A.H. commemorates the building of another *Madrasa* at Tribeni (the previous one having been built in 698 A.H. by Zafar Khan)—called *Dar-ul-Khairat* by Shihabuddin Zafar Khan, Khan-i-Jahan, the feudatory of Satganw. This Zafar Khan, Khan-i-Jahan of the reign (sic.) of Sultan Shamsuddin Firuz was an altogether different person from Zafar Khan, the warrior-saint, who had built a *Madrasa* in the same locality (Tribeni) fifteen years earlier in 698 A.H. The present mausoleum undoubtedly enshrines the grave of Zafar Khan *Ghazi* of the *Kursi-namah* noticed first by Mr. D. Money as early as 1847 A.D. But its sanctity in history lies in the fact that it has become in the course of time a museum of Muslim Epigraphy on account of the preservation of many inscription-slabs of different times built into different parts of this mausoleum.

"Similarly no successful attempt has been made to reconstruct the history of Satganw during the reigns of Kaikaus and Firuz Shah. Mr. Stapleton curiously enough identifies Zafar Khan *Ghazi* with Zafar Khan, *Khan-i-Jahan*, and says that the *Ghazi* accepted 'subordination to Shamsuddin Firuzshah.' We have no reason to disbelieve that Zafar Khan *Ghazi* died a martyr in a battle with some Hindu chief (may be Bhudev Nripati or some other) of Hooghly. This shows that he died at the initial stage of the conquest of the Satganw region a few years after 698 A.H. in the reign of Kaikaus probably, and not as late as 713 A.H. as suggested by Mr. Money. According to the *Kursi-namah*, a son and successor of Zafar Khan *Ghazi* named *Ugwhan Khan* resumed the fight with the infidels, subdued and converted them, and married a daughter of the Rajah. We think that this *Ugwhan Khan* was a Bengali corruption of the name of Ulugh Khan, and we are inclined to identify him with Ziauddin Ulgh Khan of the Lakhiserai inscription. It is quite likely that Shamsuddin Firuz Shah after having become Sultan of Lakhnawati transferred his loyal servant, Ziauddin Ulugh Khan from Monghyr to Satganw, and that he vigorously resumed the war against the Hindu chiefs of the neighbourhood. The *Kursi-namah* says that after some time Ugwhan Khan died also at Tribeni. The Government of Satganw was next conferred by Firuz Shah on Shihabuddin Zafar Khan Bahram Aitigin as *as-Sultani*. This second Zafar Khan, the builder of the *Dar-ul-Khairat* at Tribeni, styles himself *Ziaul Haq wa al-Din . . . Zafar Khan*, drops *Bahram Aitigin as-Sultani*, adds *Khan-i-Jahan* (his official title), and assumes a loftier tone by calling himself 'the aider of kings and monarchs, the patron of believers.' This imperial-Mamluk brother had perhaps helped Firuz in the dynastic revolution after the death of Kaikaus, and hence his claim to be the 'aider of kings and monarchs.' On the other hand, Zafar Khan *Ghazi* does not call himself 'aider of kings and monarchs' though he does not ignore the reigning sovereign Kaikaus. It is only thus that legend and history around Satganw can perhaps be harmonized."[80]

Sultan Shamsuddin Firuz Shah ascended the throne of Bengal at a rather advanced age, possibly when he was about 50, already the father of half-a-dozen grown-up sons eager to succeed him. He had an undisturbed reign till 707 A.H. (A.D. 1307) over the whole of Bihar, Lakhnawati, Satgaon and Bang.[66] But the later years of his reign were marked by a struggle for succession among his sons, the most turbulent among whom was Bahadur. "This rebel ruled as Sultan Ghyasuddin Bahadur Shah and issued coins from the Lakhnawati mint from 710 A.H. Bahadur had kept his father out of East Bengal also since 710 A.H., and had a chequered career till it ended in a miserable death in or about 730 A.H. So Shamsuddin Firuz may be said to have ruled effectively only in Bihar and in West Bengal (Satganw) from 710 to 722 A.H."[67] It has also been established that Tribeni in the present Hooghly district was named Firuzabad by Shamsuddin Firuz Shah who had a weakness of naming cities after himself.

Shamsuddin Firuz was succeeded by Ghyasuddin Bahadur Shah, who ruled for 20 years in Lakhnawati and Sonargaon with two interruptions. During his reign occurred the invasion of Bengal by Sultan Tughlaq Shah of Delhi. According to Barani, Bengal at this time was divided into three administrative units, Lakhnawati, Sonargaon and Satgaon with rulers (*zabitān*) in each. But "Satganw does not figure on the coinage of this period."[68] Bahadur Shah was utterly routed by Sultan Tughlaq Shah and was taken prisoner. The imperial Sultan annexed Sonargaon and Satgaon and left them in charge of Bahram Khan and the government of North Bengal under Sultan Nasiruddin in 724 A.H. On his way back to Delhi, Tughlaq Shah himself was murdered by his son Muhammad Juna at the beginning of 725 A.H. (February-March 1325) Bengal remained a part of the Delhi empire till 739 A.H., i.e. A.D. 1338 with Qadar Khan, Bahram Khan and Malik Izzuddin Yahiya as governors of Lakhnawati, Sonargaon and Satgaon respectively.[69]

In A.D. 1338 a sword-bearer of Bahram Khan named Fakhruddin, rebelled against the Sultan of Delhi on the death of his master and set himself up as the independent Sultan of Sonargaon and later on extended his suzerainty over Lakhnawati and Satgaon. Thus began the era of the independent Sultanate of Bengal. From this time (A.D. 1338) up to 1538 (the capture of Bengal by Sher Shah), Bengal enjoyed a period of unprecedented and glorious independence. Ibn Batuta, the celebrated traveller, visited Bengal in A.D. 1345-46, during the reign of Fakhruddin Mubarak Shah and mentioned in his account that he visited the great city and fort of 'Sudkawan' (Satgaon), which, according to him, was the capital of the latter. It, however, appears that Fakhruddin used to maintain his capital both at Sonargaon and Satgaon.

That the place called 'Sudkawan' by Ibn Batuta was the same as

Satgaon has been the subject of a controversy.[70] Some scholars are inclined to identify the place with Chittagong (Chatgaon) but Sukhamay Mukhopadhyaya in his work referred to above has marshalled certain arguments, citing several authorities on the subject, to prove that 'Sudkawan' could have been no other place than Satgaon.*

Before we continue with the course of political events in the history of the region comprising the present Hooghly district, it may not be out of place to look at certain aspects of the life of Bengal at the time of Ibn Batuta's visit. Jadunath Sarkar has compiled the following account from the notes of Ibn Batuta: "The current prices noted by the traveller were no doubt based on the weight of the Delhi *ratl*, but as according to the calculations of Yule and Thomas, the Delhi *ratl* (part of a maund) was equivalent in weight to 28.8 lb. avoirdupois, a valuation of the current prices in terms of the present standard of weight may be drawn up, but if this has to be translated in terms of

* About the location of 'Sudkawan' Ibn Batuta wrote: " . . . in the vicinity of which the river Ganges where the Hindus make pilgrimage and the river Jun (Jamuna) joined together and whence they flow into the sea." (The Rehla of Battuta, tr. by Mahdi Husain, pp. 235-36). Mukhopadhyaya points out that the river Ganges or Bhagirathi, at that time as now, flowed past Satgaon. The same cannot be said about Chittagong. Moreover, the evidence of Ibn Batuta that the rivers Ganga and Jamuna converged at a point near Satgaon is corroborated by the evidence of *Āin-i-Ākbari* (completed in 1598) where it has been said, "it (Ganges) is divided in three streams; the first Sarsuti; the second Jamna (Jamuna) and the third the Ganges, called collectively in the *Hindi* language *Tirbeni*, and held in high veneration. The third stream after spreading into a thousand channels joined the sea at Satgaon. The Sarsuti and the Jamna unite with it." (*Āin-i-Ākbari*, Volume II, Jarrett's translation, pp. 120-21). Mukhopadhyaya points out that when Dr. N. K. Bhattasali argued that "'Sudkawan' was the same as Chittagong, Dr. Bhattasali was using the English rendering of the French translation of Ibn Batuta's original work, where his description of the confluence of rivers had been translated as "united before falling into the sea." But Mahdi Husain's translation from the original Arabic text says that near 'Sudkawan' the Ganges and the Jamuna "joined together and whence they flow into the sea." Now, according to Dr. Bhattasali, the Ganges and the Jamuna have not converged at Satgaon, they have rather separated from there. But the evidence of the *Āin-i-Ākbari* shows that this objection does not hold good for during Ibn Batuta's time or even at the time of writing the *Āin-i-Ākbari* (i.e. from the middle of the 14th century to the end of the 16th century) the Bhagirathi and the Jamuna used to converge at Satgaon. Then again, Dr. Bhattasali's argument is that the "Ganges" (Padma) and the Brahmaputra, according to Rennell's map, used to meet about 60 miles north of Chittagong. But Mukhopadhyaya's contention is that the main channel of the Ganges in the middle of the 14th century was the Bhagirathi and not the Padma; and the latter was called the Ganges by the English for the first time. Moreover, Ibn Batuta had referred to a river that was sacred, but Padma has never been sacred to the Hindus. According to him, it is only Dr. Bhattasali's assumption that Ibn Batuta had called the Brahmaputra "Jamuna". Besides, the confluence of the Padma and the Brahmaputra was about 60 miles north of Chittagong, although Ibn Batuta had written that it was *at* 'Sudkawan' that the Ganges and Jamuna were united. Another point which indicates that 'Sudkawan' of Ibn Batuta was actually Satgaon, is that it took Ibn Batuta about a month to travel from there to Kamrup. As Chittagong is quite near Kamrup, it is unlikely that it would have taken a month to travel that distance. Finally, we learn from Ibn Batuta's account that 'Sudkawan' was one of the capitals of Fakhruddin; Satgaon as an important city of long standing could have been his capital but the same cannot be said about the newly conquered town of Chittagong. All these reasons taken together go to show that Ibn Batuta's 'Sudkawan' and Satgaon were the same city.

modern money two different tables of prices have to be drawn up, according as gold or silver is accepted as the standard. If gold is taken as the standard, one silver dinar of Ibn Batuta would be equal to approximately Rs. 7 of the present time; if silver is adopted as the standard, a silver dinar would be equal to the modern Rupee, because the old ratio between gold and silver 1 : 10 has changed to 1 : 70 at present, thereby marking a definite lowering down in the price of silver in terms of gold. It may be mentioned that a comparison between the prices of commodities at the time of Ibn Batuta with those of our times would not be accurate and scientific, as we have no sufficient data to draw up the index numbers of the different periods on which a real comparison could be based, but as the prices mentioned by Ibn Batuta would have no meaning without their relation to their present value, a computation of prices in terms of modern money becomes a desideratum. True, the gold currency was of limited circulation under the Muslim Sultans of Bengal but gold being the international medium of exchange, any computation of prices should be made in terms of the yellow metal. Accordingly, the following table may be drawn up:

Rice	approximately	8¾	mds.	(25	Delhi	*ratl*)	at	Rs. 7
Paddy	,,	28	,,	80	,,	,,	,,	Rs. 7
Ghee	,,	14	Seers	1	,,	,,	,,	Rs. 3- 8 as.
Sesame Oil	,,	14	,,	1	,,	,,	,,	Re. 1-12 as.
Rose water	,,	14	,,	1	,,	,,	,,	Rs. 7
Sugar	,,	14	,,	1	,,	,,	,,	Rs. 3- 8 as.
8 fat fowls							,,	14 as.
1 fat ram							,,	Re. 1-12 as.
1 milch cow							,,	Rs. 21
15 pigeons							,,	14 as.

"The price of staple articles tabulated above was regarded by the inhabitants of Bengal as too high for them with reference to the usual rates. Cotton fabrics of the finest texture, 15 yds. in length, were sold at Rs. 14, a handsome young concubine was sold in the presence of Ibn Batuta at Rs. 70. Ibn Batuta himself purchased at almost the same price a young slave maid of exquisite beauty named Ashurah, while one of his attendants bought a young page at approximately Rs. 140. A Moroccan named Muhammad-al-Masudi who had lived in Bengal with his wife and a servant for some time, related to Ibn Batuta that foodstuffs sufficient for their sustenance for the whole year were purchased at Rs. 7 only. Another point of interest in Ibn Batuta's narrative is the reference to mendicants and sufis who had made the province a centre of active religious propaganda. As early as 1281 A.D. the head of Qalandari order of Lakhnawati had egged on Tughril to rebel against the Sultan of Delhi and had received from the former a gift of three maunds of gold with which the iron bracelets and anklets worn by the members

of this order were replaced with gold ones. During Fakhruddin's reign, the faqirs enjoyed various privileges. They travelled by boat free of any charges, provisions were supplied to those who needed them and when they appeared in a town they were received with the gift of half-a-dinar."[71]

Speaking of these faqirs and Sultan Fakhruddin's attachment to them, Ibn Batuta narrated an interesting tale which occurred in Satgaon. "Sultan Fakruddin's boundless devotion to the faqirs led him to appoint one of them named Shayda in charge of Satganw during his absence; but the latter betrayed the trust by rebelling against him and murdering the Sultan's only son. Fakruddin promptly arrived on the scene and quelled the rebellion; Shayda fled with his following to Sonarganw, but the people of the place in fear of their lives put him and his accomplices under arrest and delivered them into the hands of the Sultan's men. Shayda was decapitated, his head being presented to the Sultan, at his own orders."[72]

With the accession of Ilyas Shah to the throne of Lakhnawati in 743 A.H. (A.D. 1342) opened a new chapter in the history of Bengal known as the Ilyas Shahi rule which extended up to A.D. 1487, i.e. for about a century and a half, with an interruption of 29 years from 817 to 846 A.H. It was during the reign of the second monarch of the Ilyas Shahi dynasty, Sikandar Shah, that the three sub-provinces of Lakhnawati, Satgaon and Sonargaon were once more re-united under the central authority of the Sultanate of Bengal, although Satgaon continued to be a mint-town and had a local Governor.[73] It was also during Sikandar Shah's rule that the Delhi Sultan, Firuz Shah Tughlaq, led expeditions against the kingdoms of Lakhnawati and Jajnagar. It is not known whether the province of Satgaon (Saptagram) acknowledged the rule of the Hindu usurper, Raja Kansa or Ganesh, as he was alternatively styled (1409-1415), "but it certainly was a part of the kingdom of his son and successor Jadu alias Jalaluddin Muhammad Shah (1415-1430)."[74] The restoration of the Ilyas Shahi dynasty became effective with the accession of Nasiruddin Mahmud Shah I during whose rule, "Orissa still held extensive tracts in south-western Bengal, and it is not unlikely that during the uncertainties of the last few reigns the Muslim frontier may have been pushed back to the Bhagirathi, a river whose waves the Ganga kings frequently claimed to have ruled. Such claims, in any case, imply hostilities. In an inscription dated 1447, Kapilendra Deva (1436-70) styles himself 'Gaureswara', and claims to have conquered the 'Mallika Parisa', an expression interpreted as having an obvious reference to the Muslim rulers of Gaur. . . . Among the mint-towns and sites of inscriptions of his reign are Bhagalpur, Satganw, Bagherhat, Faridpur, and Nusratabad (a town in Sarkar Ghoraghat, on the Karatoya), thus testifying to his rule over a fairly extensive and well-knit kingdom. Inclusion of a part of the modern

24-Parganas within the Satganw province is proved by the reference, in the Tribeni inscription of 1455, to 'thana Laubala' or Laupala, a village of that name in the Haveli pargana of the same district."[75]

Nasiruddin Mahmud Shah I was succeeded by his son Ruknuddin Barbak (1459-1474) who had served with distinction as the Governor of Satgaon during his father's rule. Barbak's reign was marked by military exploits against the Orissans and by deeds of valour by Shah Ismail Ghazi, his general and a popular saint of North Bengal.* Jadunath Sarkar gives the following account of this period: "The hostilities to which Kapilendra Deva's grants allude were most probably a continuous process. In these operations, Mr. Banerji (R. D. Banerji—Ed.) suggests, the advantage lay with the Orissan king. This is a statement for which no adequate evidence has been produced. No decisive territorial advantage seems, in fact, to have accrued to either side, for there is little evidence of the Muslims having ever lost their hold on Satganw or Tribeni. Mandaran, in the Arambagh sub-division of the Hughly district, which, two centuries earlier, figured prominently in the Lakhnawati-Jajnagar war, appears still to have remained the frontier fortress and consequently prone to change hands frequently. The campaign described in the *Risala* was undoubtedly one of such periodical border operations turning on the possession of the Mandaran fort, whose recent occupation by the Orissan forces is suggested by the statement that its raja, 'Gajapati had rebelled against Barbak's authority.' The chastisement of the Raja was entrusted to Ismail, a Qureishite Arab of Mecca who had recently arrived in Gaur and had earned fame by successfully constructing a dam across the Chutiaputia marshes, east of the city. The *Risala*, however, gives no further detail of the campaign; the statement that Ismail succeeded in easily capturing the Gajapati can only mean the ultimate recovery of the fort and the capture of its Hindu commandant."[76]

No major event marked the history of this region during the rule of the Husain Shahi dynasty (1493-1536) which followed, except that the jurisdiction of the Satgaon province was pushed beyond the Damodar river during the rule of Husain Shah (1493-1520). "According to the biographies of Chaitanya, the Yavana rule spread westwards up to the Mundeswari river, and southwards up to Pichhalda on the Rupnarayan, and they speak of the destruction of temples and the dread created by the Yavana king, which put a stop to travel in the western part of Hooghly. We also know that one of Husain's generals, Ismail Ghazi, seized the fort at Mandaran, where there is still a tomb ascribed to him; so that almost the whole of the district was included in Husain Shah's kingdom."[77]

With the overthrow of the last ruler of this line by Sher Shah in

* The exploits of Shah Ismail Ghazi have also been dealt with in the Bankura District Gazetteer (New Series). pp. 81 f.n. & 549.

1536, we pass on to the sequence of events belonging to the Mughal period of Indian history.

THE MUGHAL PERIOD

The victory of Babar in the first battle of Panipath in 1526 terminated the Turko-Afghan rule in northern India and marked the beginning of the reign of one of the greatest and most renowned dynasties in the history of the world. But shortly after its inception, Mughal power in India was eclipsed for a brief interval when Sher Shah succeeded in establishing his sway, first in eastern India and then in the whole of North India. "The sudden rise of the Afghans to the imperial position in the 15th century, their contest with the Mughals throughout the 16th and their infiltration into eastern India formed a stimulating chapter of Indo-Muslim history."[78]

When the imperial mantle fell on the Mughals, it was "followed by a bitter Afghan-Mughal contest during which there appeared a man of genius in the Afghan ranks, who once again built up a transient Pathan Empire."[79] Sher Shah rose, by successive steps, to become the master of the kingdom of Bihar by A.D. 1534. He also managed to annex the territories of the Sultanate of Bengal west of Teliagarhi and in 1536 attempted to capture Bengal itself. Such developments in the eastern part of his empire aroused the concern of the Mughal Emperor Humayun, who set out on an expedition in July 1538 and succeeded in reducing Chunar, a stronghold of Sher Shah, and thereafter pursued him into Bengal. Although Sher Shah had to submit temporarily to the might of Mughal arms, he inflicted a crushing defeat on Humayun at the battle of Chausa towards the end of 1539.[80] The next month Sher Shah captured the whole of Bengal except for the far eastern corner between the Brahmaputra and the Surma. "Thus Sher's authority was re-established over the country comprising Gaur and Sharifabad, Satganw and Chittagong."[81]

Sher Shah divided Bengal into several sub-provinces, each under a separate governor and all under the control of Kazi Fazilet.[82] He then prepared for the inevitable final contest with Humayun which took place in May 1540 in the battle-field of Bilgram.[83] Humayun was thoroughly routed, and the imperial sceptre of India passed into the hands of Sher Shah.

On the death of Islam Shah Sur, son of Sher Shah, (30 October 1553) the dissolution of the Afghan empire started and Shamsuddin Muhammad Shah Ghazi, the Governor of Bengal, became independent and occupied Satgaon, from where he struck silver coins in his own name.[84] "Troubled times followed. Bengal was seized by the Afghan Governor of Bihar, Sulaiman Karrani; while Telinga Mukunda Harichandan, the last independent Hindu king of Orissa, conquered south-western Bengal up to Tribeni. Ultimately, in 1567-68, Sulaiman's army attacked the king of Orissa while at Tribeni,

and forced him to retreat to Fort Kotsama, probably the modern Kotsimul on the west bank of the Damodar. Sulaiman's son, Bayazid, and his general Illahabad Kalapahar, then invaded Orissa through the hilly country known by the generic name of Jharkhand. Internal revolt having broken out, the Orissa king hurriedly retired southwards and was killed while fighting the rebels. After this, Sulaiman's army overran Orissa and annexed it as far as the Chilka lake. The name of the conqueror still survives in the town of Salimabad on the Damodar and in *Sarkār* Sulaimanabad; but his chief claim to fame is perhaps the skill and vigour with which he consolidated the Muhammadan power in the newly conquered territory."[85]

Sulaiman Karrani died in 1572 and was succeeded by his eldest son Bayazid, who by his insolent, harsh and extortionist behaviour estranged the Afghan nobles and was dethroned and killed. While Daud, his younger brother, was being crowned in Bengal, his nephew, the son of Bayazid, was set up as the ruler of Bihar by a rival faction of Afghan nobles. As Daud sent an expedition into Bihar, Munim Khan (Khan-i-Khanan), the Mughal general of Akbar, simultaneously advanced towards that province to take possession of it. The discontented Afghan nobles now entered into an agreement with the Mughal general on their own initiative which forced Daud to come to the help of his army in person. Emperor Akbar, who had hitherto been engaged in the Gujarat campaign, was now free to turn his attention to the east and to send reinforcements to Munim Khan. As dissension and strife increased in the Afghan camp, Daud was held in check in Patna by the Mughal army. At this stage Akbar himself arrived in Bihar with his mighty war machine.[86] Daud was put to flight, and while the Emperor returned to his capital, his general Munim Khan pursued Daud Khan and captured Tanda, the capital of Bengal, without a fight.

"Daud fled to Orissa by way of Satganw (Hugli), and the Afghan captains scattered to the north-east and south of Bengal. From his base at Tanda, Munim Khan sent out strong detachments to Satganw (Hugli), Ghoraghat (Dinajpur-Bogra), Bakla (Bakarganj), Sonarganw (Dacca) and Mahmudabad (Jessore-Faridpur) to establish imperial authority. In the Ghoraghât sub-division, Sulaiman Mankali, the Afghan Jagirdar, was defeated and slain by Majnun Khan Qaqshal and the broken remnants of his followers were driven into Kuch Bihar. In the south, Daud's chief adviser Srihari (the father of Pratapaditya) parted company with his master and took refuge in the maritime wilderness of Khulna. Thus in west, north, central and south Bengal no organized Pathan power was left, though as yet no Mughal force or collector was posted in Pabna, Rangpur-Dinajpur, Mymensingh, Bhawal (north Dacca), Jessore-Khulna or Barisal. Nor in the wilds of Bankura-Birbhum.

"Burdwan was made the advanced base of the invaders, but their

supreme commander took post at Tanda, near the old city of Gaur in the Malda district.

"Then the victors tired of their exertions and 'thought only of taking their ease in that country.' But Rajah Todar Mal came to them from headquarters, and urged them to follow up Daud into Orissa and end the war decisively. The army led by this Rajah advanced from Burdwan to Garh-Mandaran, in the Arambagh sub-division of the Hughli district, midway between Goghat and Basudevpur, and some eight miles due west of Arambagh. Here spies brought the report that Daud had faced about at Debra-Kesari (not Kesiari, 22 miles south-west of Midnapur city). Todar Mal called up reinforcements from his chief, and on their arrival marched from Mandaran to Kolia. Daud then fell back on Garh-Haripur, eleven miles south-east of the Dantan station on the B. N. Railway.

"The Rajah halted with his army at Midnapur. Here Muhammad Quli Barlas died, the Mughal troops were disheartened, disorder broke out among them as they objected to continuing this jungle campaign. So, Todar Mal beat a retreat to Mandaran. Meantime, the Khan-i-Khanan, on being informed of the detachment's retreat to Mandaran and the dissensions in the camp there, had pushed up reinforcements from Burdwan."[87]

Todar Mal was now in a position to resume the offensive and the Mughal army encountered the troops of Daud Khan on the plains of Tukarao, nine miles south-east of Dantan, on 3 March 1575 and won a decisive victory. Bengal was thus formally annexed to Akbar's empire, "but the actual imposition of imperial peace and orderly Mughal administration on Bengal was still far off. That province remained for many years a scene of confusion and anarchy. . . .There was a Mughal Subahdar (*sipāh-sālār*) for Bihar and another for Bengal, but the authority of each was paralysed by the inadequacy of his forces and the disobedience, greed and mutual jealousies of his subordinates. The history of the years 1575-1594 is a sickening, monotonous tale of local offensives with varying results but no final decision, and the temporary expansion and retreat of the imperial power, while the weak and the innocent suffered at the hands of both the parties."[88] And when Munim Khan died at Tanda on 23 October 1575, the confusion among Mughal officers in Bengal was complete.

Husain Quli Beg (Khan-i-Jahan) was appointed by Akbar as the next Governor of Bengal (15 November 1575). The new Viceroy on his arrival found that the imperial authority was being threatened from many sides. But he soon accounted for all the rebels including Daud Khan who was beheaded this time. Bengal was once more included in the imperial domains. "In Bengal, Khan-i-Jahan pushed on to Satganw (Hughli) and crushed the Afghan bands roving there, especially that of Mahmud Khan Khas-khel (popularly called *Mati*) who kept possession of Daud's treasures and family."[89]

The Mughal conquest was still not complete and effective in this area. Taking advantage of the mutiny of Mughal officers the Afghans in Orissa invaded south-west Bengal. "Their leader, Katlu Khan, defeated Mirza Najat Khan, the Governor of Satgaon, who fled to the Portuguese at Hooghly, and for four years Burdwan and Midnapore, with the intervening subdivision of Arambagh, became the theatre of war between the Afghans and Mughals. Ultimately peace was concluded, leaving Katlu in possession of Orissa."[90] But it was not before the expedition of Man Singh, beginning in 1590, that Mughal power was effectively established all over Bengal. The whole of East Bengal as well and the entire coastal region "south of an east-west line drawn through Hughli" were still outside the Mughal sphere of influence.[91]

The conquest of Bengal (or a part of it) by the Mughals unleashed new forces of anarchy. For 12 years after the initial conquest, Bengal remained, for all practical purposes, a collection of petty principalities ruled over by Afghan chiefs and Hindu princelings, some of whom formed anti-Mughal confederacies from time to time. In November 1586, Akbar introduced a uniform system of *subāh* administration throughout his empire. A viceroy, a *diwān* and a *bakshi* were accordingly sent to Bengal but the consolidation of Mughal authority in the pacified province really began in 1594 and for this Raja Man Singh had to struggle for four years from 1590 to 1594. In April 1590, Man Singh set out on an expedition from Bihar for the conquest of Orissa. He reached Jahanabad (modern Arambagh in the district of Hooghly) via Bhagalpur and Burdwan and encamped there being held up by the early rains of Bengal. Jehanabad was then situated on the frontier of Orissa.[92] Qutlu Khan Lohani, the Afghan ruler of north-west Orissa, sent a large force to the fort of Raipur situated some 50 miles west of Jehanabad. Jagat Singh, the son of Man Singh, was in charge of the advance guard of the Mughal forces. For his failure to take adequate precautions, he was surprised by the Afghans and the Mughal army was routed. Jagat Singh himself was wounded and was saved from capture by the Malla King Bir Hambir who gave him asylum in Vishnupur. Qutlu Khan died a few days later and the Afghans came to terms with the Mughals. The truce was, however, short-lived and the Afghans attacked the kingdom of Bir Hambir which soon brought Man Singh to the latter's succour. Marching through Jehanabad, Man Singh routed the Afghans near Midnapur and annexed the whole of Orissa. The Afghans were thus subjugated but they made one more attempt in 1600 to overthrow Mughal rule and succeeded in temporarily occupying the whole of south-west Bengal. Man Singh, who was away at the time to Ajmer, came back hurriedly and forced the Afghans to retreat into Orissa. How all these events affected the life of the people in the Hooghly region can be gathered from the following account given by O'Malley:

"The district of Hooghly did not escape the horrors of war, for the Arambagh subdivision (with the adjoining parts of Burdwan and Midnapore, through which the royal road passed) was frequently ravaged. A graphic description of the anarchy and oppression prevailing has been left in the introduction to the poem *Chandi* by Kavikankan, who, towards the end of the 16th century, was forced by the exactions of the tax collectors to migrate from his home in the Burdwan district to Ararha in Midnapore district, then under a Hindu chief. Inland trade was at a standstill; the coinage was debased; the lands lay uncultivated, though taxes were still forced from the people; revenue and rents were screwed up to a high figure and on non-payment both landlords and tenants were forcibly seized, beaten and thrown into prison; life and property were insecure. On the other hand, the tract lying along the river Hooghly, being farthest from the high road to Orissa, escaped the ravages of the opposing factions, and was comparatively unmolested. Here trade, especially trade with European countries, flourished; and it was during the Afghan rule that the Portuguese settled at Hooghly and established the first European settlement."[93]

The years between 1572 and 1612 witnessed the expansion and consolidation of Mughal rule in Bengal. As conditions were unsettled and rebellions and warfares were the order of the day, the Mughal Government in Bengal, in its initial stages, had to take the shape of a military occupation. Jadunath Sarkar has pointed out that although Bengal had been included among the 11 *subāhs* mentioned in the imperial proclamation of Akbar of November 1586, it took almost a quarter of a century to enforce that order in Bengal. "Hence, the beginning of the reign of Jahangir is a convenient place where we can pause in the narration of events and take a general survey of the Mughal age in Bengal and its effect upon the province. ...The period of Mughal imperial rule over Bengal witnessed the working of certain new forces which have completely transformed Bengali life and thought and whose influence is still operating in the province. In one word, during the first century of Mughal rule (A.D. 1575-1675), the outer world came to Bengal and Bengal went out of herself to the outer world, and the economic, social and cultural changes that grew out of this mingling of peoples mark a most important and distinct stage in the evolution of modern Bengal. ...True, the Mughal Emperors did not deliberately introduce these forces, but the political change which accompanied their conquest and the administration which they imposed on the conquered land made the triumph of the new forces possible and easy. These two forces were the growth of a vast sea-borne trade and the organisation of the Bengal Vaishnavs into a sect."[94]

When peace was ultimately restored, Todar Mal's rent-rolls were enforced in Bengal. These rent-rolls were adapted from older land

revenue records with some minor modifications. The territory now comprising the district of Hooghly and many adjoining tracts were divided into three *Sarkārs*—Satgaon, Sulaimanabad and Mandaran. *Sarkār* Satgaon had 53 *Mahāls* and paid a yearly revenue of 1,67,24,720 *dāms; Sarkār* Sulaimanabad consisting of 31 *Mahāls* paid an annual revenue of 1,76,29,964 *dāms* and *Sarkār* Mandaran with 16 *Mahāls* paid 94,03,400 *dāms* as yearly revenue.[85]

The agrarian history of Bengal during this period presents some features of special interest as it was in Bengal that the early British administrators inherited the revenue system of the Mughals which they later carried to north and central India thereby creating some confusion there, at least in the initial stages, since in those parts of the country the Mughal system of land management was quite different. In Bengal, as far as it is possible to ascertain, Akbar maintained the methods of assessment which were in force at the time of its annexation. In the words of Moreland: "The story begins in the sixteenth century with the decay of the port of Satgaon, and the consequent migrations of its population. Most of the migrants moved to Hugli, which, as a centre of foreign trade, came practically into the possession of the Portuguese. At this time the country near Hugli was largely unoccupied, and we are told that, before the Mogul annexation, Portuguese individuals had obtained farms (*ijara*) of portions of it at a low revenue. In view of the conditions which prevailed, it is reasonable to infer that these farms were in the nature of clearing-leases, that is to say, a fixed annual payment was accepted for vacant land, which the farmer had to bring under cultivation in order to obtain a profit. These particular farms were apparently brought summarily to an end when Shahjahan expelled the Portuguese from Hugli; his orders specified that the intruders were to be exterminated, while in the course of the operations detachments were sent into the neighbouring villages 'to send the Christians of *ijaradars* to hell', meaning, I suppose, the Christian tenants whom the Portuguese farmers had settled on the land. While, however, most of the migrants from Satgaon had moved to Hugli, a few Hindu families had gone further down the river, and founded two settlements, which were named Govindpur and Sutanuti. They, or their successors, also obtained possession of an existing village named Deh-i-Kalkata, and the three places can be spoken of as 'the three Towns', in the phrase used in the early British records."[86]

Whether the right of farming the lands given to the British should be called zemindary or not has remained a vexed question. About the connotation of the term 'zemindar' Moreland says: "Whether this sense of the term prevailed generally in Bengal, or was confined to the neighbourhood of the Hugli, it is a question to which I cannot give a definite answer based on contemporary sources. I have not had opportunities of studying any records of the local history during

the seventeenth and early eighteenth centuries, and I cannot offer a confident account of what happened in the province at large during the interval between the preparation of the *Ain* and the appointment of the East India Company as Diwan in the year 1765. If, however, we may accept Sir John Shore's later account as correctly representing the facts of that period, the word zemindar carried throughout Bengal the wider meaning which, we have seen, was current in Calcutta. Shore recognised that the zemindars of Akbar's time were what I have called Chiefs, that is to say, men with claims antecedent to the establishment of the Mogul government, and enjoying hereditary positions subject to recognition by the Emperor. The great majority of the Bengal zemindaris had, however, come into existence after Akbar's reign. At first the position was definitely official, that of a revenue collector with certain stated remuneration; but the collector developed into a Farmer, paying a fixed sum, and making what he could; and then the Farmer became assimilated by degrees to the Chief, acquiring hereditary claims, and obtaining the same designation, which thus came to cover Chiefs, Farmers, and collectors alike. According to this account, the Bengal zemindar of the eighteenth century was preciously the counterpart of the taluqdar of Northern India at the same period, a person in possession, whatever his title might be."[97]

A more recent interpretation given by Irfan Habib is perhaps more expressive and may be quoted here at some length: " 'Zamindar' in modern Indian usage means a landlord. Considerable controversy has centred round the question whether the modern zamindar is wholly a creation of British rule. This controversy has involved the further question whether the word *zamindar* when used in the literature of the Mughal period bore the same sense in which it is now understood. Unfortunately, there is no direct explanation of what it then signified, either in the *Ain-i Akbari* or in any of the more easily accessible historical sources. Recent interpretations have, therefore, been rather in the nature of inferences drawn from very scanty materials. The generally accepted view seems to be that the zamindar in Mughal times really meant a vassal chief and could not exist in the directly administered territories of the Empire.

"That the word *zamindar* was frequently applied by contemporary authorities to chiefs in general is beyond dispute. What seems questionable is the assumption that this was its entire, or even real, meaning. There is no easier way of refuting the identification with vassal chiefs than by showing that the zamindars, so called, did exist in the regularly administered territories and were by no means confined to the tributary states. It happens that the evidence of the *Ain-i-Akbari* is alone sufficient to establish this fact. Why this has not been obvious so far is owing to a single undetected error in Blochmann's standard edition of the *Ain*, an error that has resulted in a serious misrepre-

sentation of its statistical information. In this edition presumably for convenience of printing, the statistics under the 'Account of the Twelve Provinces' were not reproduced in their original form found in the best manuscripts of the work. Blochmann not only dispensed with columns of the original tables, but also dropped, without any explanation, the column-headings. His reader, therefore, has no means of knowing that the names of the castes entered against each *pargana* in these tables, belong really to a column headed '*zamindar*' or, occasionally, '*bumi*' in the manuscripts."[98]

As for a definition of the term '*zamindāri*' and a description of its essentials, Dr. Habib goes on to say: "Literally, the word *zamindār*, a Persian compound, means 'holder of land'. The term was probably coined in India as early as the 14th century, and is not found in the revenue literature of Persia proper. Another Persian word used as a synonym for *zamindār*, often by Abul Fazl, though only rarely by other writers, was *bumi*. . . .The synonym for *zamindār* used most often than any other was *mālik*. In some documents a *zamindār* is directly termed *mālik*. In two 17th century documents, *milkiyat* (i.e. the right of a *mālik*) and *zamindāri* are used indifferently for the same right: and in a large number of documents, we find '*milkiyat*' and '*zamindāri*' coupled together as names of a single right. Now, while the significance of the other synonyms is obscure, *mālik* is an Arabic term which has its own place and distinct sense in Muslim law, namely that of 'proprietor'. *Milkiyat* is, therefore, nearly what in English would be called 'private property'.

"It is, however, one thing to say that *zamindāri* was a form of *milkiyat* and quite another to assume that all rights over lands designated *milkiyat* were *zamindāri* rights. This seems to be the real point in a definition of the word *zamindār* offered by Anand Ram Mukhlis, an official at the Delhi Court, writing in the last years of Muhammad Shah's reign. 'Zamindar', he says, 'etymologically (*dar āsl*) means a person who is a land-holder (*sāhib-i-zamin*), but now signifies a person who is the *mālik* of the land of a village or township and carries on cultivation'. Here the distinction drawn is between an ordinary occupant or holder of land and one whose right extended over land occupied by a number of persons (i.e. the population of a village or township). It was only to the latter that the term *zamindār* was applicable. We have seen. . .that the peasants were often in fact described as *māliks*; but by terms of Mukhlis's definition, they could not be called *zamindārs*. The association of *zamindāri* with the village, rather than the field, is borne out by the manner in which the size of the area held under *zamindāri* rights is specified in the documents of the period. A *zamindāri* is always said to comprise a village or a certain fractional part of a village, never so many *bighās* or definite units of area. The word *biswa*, which is sometimes employed in stating the area of *zamindāri*, does not mean the actual

unit of area of that name, equal to one-twentieth of a *bighā*, but represents a twentieth part of a village.

"*Zamindari* was, therefore, a right which belonged to a rural class other than, and standing above, the peasantry."[99]

"Where, as in Bengal, the *zamindar* paid the authorities a fixed sum for the revenue of a village and then made revenue collections from individual peasants, at rates fixed by custom or by himself, his income would have been simply the difference between his collections and the amount he had paid to the authorities."[100]

The next important point about Todar Mal's rent-roll was the fixing of revenue demands on the peasantry. According to Moreland, the estimates of these arrived at by James Grant in his *Political Survey of the Northern Circars* and *Historical and Comparative Analysis of the Finances of Bengal* were not quite accurate since Grant had based his assumption on a study of Murshid Quli Khan's re-organization of the revenue system of the Deccan which he had thought to be a 'servile copy' of Todar Mal's rent-roll.

"According to Grant, the history of the assessment of Bengal was as follows: (1) About the year 1582, the revenue-Demand on the peasants was fixed in detail by Todar Mal at figures representing one-fourth of the average produce. This set the standard of Demand; and collections were made according to it by zamindars, who were annual contracting farmers, with stated allowances by way of commission, and small estates, their entire legitimate receipts never exceeding ten per cent of the Demand. (2) This Demand was revised by Shah Shuja in 1658, but its basis was not altered; some accrued increases (of unexplained nature) were incorporated in the figures and also the Demand on territory annexed by conquest, or transferred to Bengal from other provinces. (3) A similar revision of the Demand was made by Murshid Quli, or Jafar Khan in 1722. (4) Thenceforward, successive levies were made on the zamindars in the form of cesses, the basic Demand remaining unchanged. . . . .

"Whether Grant's representation is correct is a question which I cannot answer with certainty. A definite verdict would have to be based on independent study of his authorities, the volumes of old Persian accounts and other documents to which he refers in general terms; I have not seen these, and I cannot trace any later reference to show whether or not any of them still exist. It is certain, however, that Grant's starting point was wrong. His statement that Todar Mal made a detailed assessment of the province is historically impossible, as Shore pointed out, and it is directly at variance with the official record in the *Āin*, that Akbar maintained the method of assessment (*nasaq*) which he found in force; whether the word *nasaq* denotes group-assessment, or farming, or both, it excludes the possibility of such a detailed assessment as Grant asserted. His statement that the basis of the assessment was one-fourth of the produce must also be

incorrect, for in Todar Mal's time the State's claim was uniformly one-third; the figure of one-fourth was obviously derived from Grant's early studies of the Deccan assessment, which he was led to believe was a servile copy of Todar Mal's work. Grant's account, therefore, cannot be accepted in its entirety, and the initial misapprehension affects the whole of his argument. In my opinion, the *most probable reading of Grant's earlier figures is that the documents* which he used referred to Valuation, not Demand."[101]

Irfan Habib puts the matter quite explicitly when he says: "Khafi Khan, . . .declares that Todar Mal set the demand at half the produce in the case of crops dependent upon rainfall, while from fields irrigated by artificial means he took a third, if sown with foodgrains, and lesser proportions, if sown with cash crops. But as Moreland explains this is apparently a late legend based upon Murshid Quli Khan's reforms in the Dakhin."[102] And again, "In Bengal, where crop-sharing was not practised and measurement was the exception, the revenue demand was based upon *Nasaq*. . . .The revenue assessment (*jamā*) on the *zamindārs* had a semi-permanent basis, though it could sometimes be arbitrarily increased."[103]

When we analyze the burden of revenue in the Mughal period on the mass of agriculturists and its effect on agrarian operations, we are led to believe that the load was generally so heavy that it ultimately led to an agricultural crisis in the closing stages of the rule of the Great Mughals. Irfan Habib, after examining the chronicles of foreign travellers as well as a mass of internal evidence, concludes that from Jehangir's reign the area under cultivation and the productivity of the soil in most parts of the Mughal Empire tended to register a decline as a result of rack-renting. Citing extracts from relevant passages of travellers' accounts, he goes on to say: "These statements in so far as they suggest a decline in cultivation cannot be tested by reference to the area statistics. It is true that the area figures of Aurangzeb's reign generally considerably exceed those of the *Ain*, . . .but this only means that measurement was extended in the intervening period to land previously unsurveyed and does not necessarily imply an extension of cultivation. There are, to our knowledge, a few areas where land-reclamation appears to have taken place on a large scale in Mughal times, e.g. the eastern portions of deltaic Bengal and parts of the Tarai. These, however, are unlikely to have constituted more than an insignificant part of the cultivated area of the whole Empire. Moreover, the development of one tract might well have been accompanied by the desolation of another.

"The *jamadami* (assessed revenue) statistics, which are available to us in profusion for the whole of the 17th century, show a considerable increase. But this increase is almost entirely cancelled by the great rise in prices which took place in the same period. . . .There was no change in the burden of the land revenue in terms of produce. If,

then, the *jamadami* remained static, when adjusted to the rising price-level, one can only assume that there was no, or only a very insignificant, extension of cultivation. If further, there is any substance in the inference that the *jamadami* tended to be artificially inflated the area under cultivation would seem to have contracted."*

An idea of the commodity prices current in Bengal during the Mughal period may be had from the narratives left by contemporary European travellers. Writing in 1628 Manrique observed that rice then sold at prices ranging between 3 annas 2 pies and 4 annas 3 pies per maund; butter was priced at Rs. 2 per maund; 20 to 25 chickens could be had for Rs. 2 and a cow did not cost more than a rupee.[104] The Royal Agricultural Commission of 1928-30 reconstructed the prices of paddy for several hundred years for various districts of India. The figures for Hooghly during the closing stages of the Mughal and the early period of British rule were as follows:[105]

Year	Price per maund
1670	1 anna 4 pies
1768	4 annas 3 ,,
1790	1 anna 8 ,,
1804	1 ,, 3 ,,

Bengal's principal crops during the Mughal period were rice, a little quantity of wheat of poor quality, cotton (then an important produce of Bengal), sugarcane (Bengal sugar was then unrivalled both in output and quality), oilseeds and jute.[106] Potato is another very important item of agricultural produce introduced into Hooghly by the Portuguese who brought it from Brazil.

The coming of the Europeans to this part of the country was another important event which took place during the initial years of Mughal rule in Bengal. The details of this occurrence will be dealt with elsewhere but certain issues of a political and social nature that arose out of the presence of these foreign traders in Bengal have to be kept in view although we are mainly concerned here with the general trend of events in and around the Hooghly district during this period.

In point of time, the Portuguese were the first to arrive in Bengal

* Irfan Habib—op. cit. p. 326. Compiling data from various sources, Dr. Habib has reconstructed the increase in *jamadami* figures in index numbers (table: p. 328) of which the figures for Bengal are as follows:

Year	Increase for Bengal
1595-96	100
1605	70
pre-1627	83
1628-36	92
1633-38	100
1646-47	116
c. 1656	107
1667	122
1687-1709	122

and the district of Hooghly was one of the main centres of their trading activities. "In 1535 Diego Rebello, the factor of Coromandel pearl fisheries, came to Satgaon in his own armed vessels and was strong enough to forbid two Arab ships to carry on trade. The next year proved a landmark in the history of the Portuguese in Bengal. For in that year Mahmud Shah allowed Martin Affonso de Mello to build factories in Chittagong and Satgaon and also offered them the custom-houses of the two ports. Nuno Farnandes Freire was appointed the chief of the custom house of Chittagong with grants of land and the power to realise rent from the native residents. The custom house at Satgaon went to Joao Correa, but the establishment at this place does not seem to have prospered.

"It was the neighbouring port of Hugli, originally an insignificant village, that became the chief centre of Portuguese activity in the *subah* of Bengal. The port, Manrique informs us, was founded by some Portuguese traders who came from various parts of India to buy and sell and had large *golas* or store-houses for that purpose. In the beginning they wintered here for 5 to 6 months and, some years later, prolonged their stay. In the year 1579-80, Pedro Tavares founded the settlement of Hugli, under the authority of a *farman* from Akbar. The settlement grew rapidly and with it the trade and influence of the Portuguese in Bengal. In 1588 Fitch found the whole town of Hugli in Portuguese hands. Cabral described it as a common emporium of Indian and inter-Asiatic trade. In 1597 the *Ain-i-Akbari* noted the inclusion of Satgaon as well within the fold of Portuguese authority. The rich citizens bought islands and properties along the river banks."[107]

The Portuguese hegemony in this region soon brought in its wake some political problems which triggered a conflict between them and the Mughals, for the Portuguese, having started as mere traders, had entrenched themselves virtually as an independent power which the imperial authority could not tolerate. "Towards the end of the 16th century the bulk of Bengal's overseas trade had passed into their hands. At Hugli, they ruled in practical independence subject only to the nominal authority of the Portuguese home government and their representatives at Ceylon. . . .But then came a period of set-back. By the time when the Portuguese trade was firmly established in Bengal, the general decline in their power all over Asia had already set in. The Dutch had appeared in the Indian seas as a formidable rival and the English were soon to follow. Within Bengal, adverse political circumstances added to their misfortunes. In 1607 the Arakan king massacred their settlement at Dianga. Soon after, the king of Chandikan treacherously killed Carvalho and started a persecution of the Christians. In 1616 Gonsalves' short-lived reign in Sondip was put to an end by the Magh king. In 1632 Hugli, the great centre of Portuguese activity in Bengal, fell before the imperial army of Shahjahan."[108]

In the latter years of Jehangir's reign, Bengal was the scene of warfare and strife and within four years of Shah Jahan's accession in 1628, a big clash took place between the Portuguese and the Mughals at Hooghly. As Jadunath Sarkar puts it: "It was the first land battle in India in which indigenous troops and methods of warfare triumphed over European troops and European leadership. . . ."[109]

Before we go into the actual course of events relating to the clash between Shah Jahan and the Portuguese and the subsequent siege of Hooghly by the emperor, it is necessary to trace in brief outline the reasons for the tension that existed at the time between the Mughals on the one hand and the European traders on the other.

"The Portuguese opened and widened the gate to the Asian market in the main, while some at least of Bengal's products trickled into Portugal through traders who visited Portuguese India or came from there. But even in this period, the wider market of Europe was being slowly opened by the Dutch ships and frigates which touched at Bengal's coast and sailed on to Holland *via* other parts of India and Africa. What was more, the nation which was destined to reshape Bengal's economy, was already looking for a gateway into the province."[115] But although the European traders opened up Bengal to the world outside, it was they who reaped the largest benefits from their commercial activities here. "The control of Bengal's sea-trade now passed almost entirely out of the hands of Indian traders to be monopolised, first, by the Portuguese and later to some extent by the Dutch as well."[111]

The profits made by the European traders in Bengal within a short period of time were indeed fabulous. Among the sharers in this new opulence one must count the middlemen to whom the Portuguese advanced money for purchases, the '*sodāgores*', foreign and native, who carried to the court of Agra the rich wares imported from abroad. "The common folk were, however, not entirely deprived. Along the river Ganges, in the small but important territory directly under the Portuguese, there developed a flourishing colony. The native, as much as the foreigner, shared in its prosperity. Besides fostering the general demand for Bengal's products abroad, the Portuguese provided direct encouragement to her cotton, silk and certain minor industries by helping these develop in the territory occupied by them. . . .

"A development of far greater significance was the importance which now accrued to certain regions comparatively insignificant earlier and the shifting of the centre of economic gravity to these places. . . .The silting of a river might have been primarily responsible for the decline of Satgaon. But the new port of Hugli, as the *Padshahnama* noted quite correctly, stole away much of the trade of the older *Porto Pequeno* and became the chief trading emporium in Bengal. The ships of the Portuguese trailing along the Ganges past

Betor and Sutanuti chalked out the path which the greater commerce of the Dutch and the English were to follow in future."[112]

In this background it is easy to follow why a clash between the Portuguese, the foremost among the European traders at that time, and the Mughals became inevitable. "One of the strongest barriers that beat back the rising tide of Mughal centralisation in Bengal, was the Portuguese settlements which maintained their virtual independence to the very end of Jehangir's reign. Even the mere territorial extent of these settlements was considerable and the extent of their power was greater than that of their territory. They occupied the entire tract from Hugli to Satgaon and individual citizens bought up properties along both sides of the river. They lived in the completest form of independence in this region. The Mughals, satisfied with the revenues of the market and the customs, left the immediate government to the Portuguese, who elected annually a *Capitan Convidor* and four assistants, in accordance with the orders of the Spanish king. Even the Viceroy at Goa had no power over them and the fleet of the Viceroy of Bengal himself, while entering the Hugli, would have to submit to certain formalities. With their boats they commanded the river Hugli itself. Power generated arrogance and, we are told, that at the time of Shahjahan's accession they did not even send the customary marks of submission. The prolonged resistance they offered to the imperial army is a further evidence of their strength. ... Fortunately for the Mughals, the scattered settlements of the Portuguese in Bengal obeyed no single authority, nor formed parts of any common organisation. Had such been the case, the establishment of Mughal authority in Bengal might have proved a more difficult task, and the Portuguese India on the western coast might still have a counterpart in the east along the river Hugli and the shores of the Bay."[113]

There were also other grave reasons for the growing disfavour with which the Mughal authorities looked upon the Portuguese. "The activities of the Portuguese pirates and buccaneers, assisted ably by their Magh allies, constituted a perpetual threat to the life and security of the Bengali people throughout the period and even after the fall of Chittagong during Shaista Khan's viceroyalty. .. Perhaps the most obnoxious activity of these pirates—if one can at all make such an invidious distinction—was their slave trade, in which the more peaceful settlers also participated. A graphic picture of this gruesome trade has been preserved in the detailed account of Shihabuddin Talish. The extent of the ravage caused by it may be gauged from the fact that between 1621 and 1624, the Portuguese brought to Chittagong alone 42,000 slaves from the various districts of Bengal. The settlers at Hughli regularly bought these slaves from the Maghs and so did the Portuguese at Tamluk. It is a significant fact that at the time of the fall of Hughli the bulk of its defenders

consisted of slaves. Shahjahan accused the Portuguese at Hughli of selling Bengali prisoners to the Maghs for their galleys."[114]

A picture of the conditions prevailing within the Portuguese settlement at Hooghly has been given by Jadunath Sarkar. "Inside the town the population did not form a happy family or even an orderly civil society. The small body of pure Europeans stood aloof from the numerous half-breeds (mestizoes), while the black peasants and slaves formed a third and depressed caste. At the top of the social ladder, the priests out-numbered the able-bodied male laymen of European race, and these two classes were divided by pride, jealousy and conflict of material interests. Hence a united opposition to any attack from outside was impossible. Moreover, all the manual labour of fortification, entrenching, rowing the ships and serving the naval guns—was done by Indians, mostly Bengalis of the peasant class mixed with purchased slaves. These men did not form part of the city population, but lived with their families in huts in the defenceless villages outside, so that the arrest of their wives and children in the suburbs by the Mughal invaders at once forced the sailors of Hughli to submit to the invaders, and their defection paralysed the defence of the port through an absolute shortage of labour. The vast Indian population of Hughli, made up of mechanics, tradesmen and servants, merely wanted to live in peace; they had no heart in resisting the Mughals to the bitter end and so the fighting for the port fell solely on the Europeans and mestizoes, assisted by a small band of loyal black Christians."[115]

When, after his accession in February 1628, Shah Jahan sent Qasim Khan Juyini to Bengal as the Governor, he personally instructed him "to take possession of Hughli, crush the Portuguese power, and make captives of the white men, women and children there to be sent to Court and made Muslims or slaves."[116] The subsequent events may best be described in the words of Jadunath Sarkar. "Qasim Khan was a man of exceptional ability and experience. He knew his own side's weakness in firearms and naval skill, and made his preparations very cleverly so as to concentrate an overwhelming force against the enemy and at the same time throw them off their guard. His chief object was to block their path of retreat down the Ganges to the open sea and prevent the arrival of reinforcements to them by ship.

"He formed three forces which were to move by different routes at different times and converge at the time of attack. First, he sent under Bahadur Kambu (his chief lieutenant) a division, including his personal contingent of horse and foot, to Makhsusabad outwardly for taking possession of the Crown lands there, but with secret orders to wait for the other forces. A second force was got ready under the subahdar's son Inayetullah as its nominal chief, but with Alayar Khan as the true commander. To deceive the Feringis it was publicly announced that the expedition was designed against the

zamindar of Hijli island. This force on reaching Burdwan halted. The actual attack on Hughli was put off till the flotilla (*nāwwārā*) of the imperial government (under Khwaja Sher) and the numerous war-boats of the loyal zamindars under Masum Khan (the son of Musa Khan and grandson of the famous Isa Khan Masnad-i-Ala) had advanced from Sripur (south of Dacca) to Sankrail (some 10 miles below Calcutta) and closed the channel of the Ganges.

"On the 14th June 1632, the flotilla reached this spot. Immediately on getting news of it, the division at Burdwan by a rapid march of one day and night reached Haldipur, midway between Satgaon and Hughli, and a few days afterwards the first division from Makhsusabad arrived and joined them. The combined land army hastened south to Sankrail and helped the fleet in throwing a bridge of boats across the Ganges at the narrow straits. They also began to dig trenches on both banks of the river. These earthworks in the course of time extended for many miles between Hughli and Betor, and when in August the big guns arrived from Dacca, Burdwan and Rajmahal and were mounted on these batteries, and more chains were drawn across the Ganges at different places, the doom of Hughli was sealed.

"The attacking forces appeared before Hughli on 20th June and the place was captured on 15th September, after an investment of nearly three months, but there was nothing heroic in the victory of the imperialists.

"The first portion of the invading army was sighted about three miles from Hughli on 16th June. Some days were passed in parleys started by the frightened people of the port. Soon the second division arrived, and on the 20th and 21st the imperialists made demonstrations before the city, with a view to discovering the location and strength of the defences. The grand attack was delivered on the 22nd; the Mughals in full force advanced and captured the suburbs. The defenders were a little over 300 whites, with a large number of Indian Christians, mostly slaves (a very unreliable corps), and four thousand Bengali sailors for manning the warboats; their captain-general was Manoel de Azevedo. 'The city had no walls nor artillery of any kind. What musketry they had—there was much of it and of good quality--was distributed and (sub) captains appointed.' (Cabral, ii. 399). The severe loss which the invaders suffered on this day from the musket-fire of the Portuguese concealed in a garden, entirely damped their ardour for open assaults, and for the next two days they fought from afar and feebly.

"Negotiations for peace were now opened by mutual desire, the Portuguese troops being overborne by the clamour of their peace-loving property-owners, and the Mughals wishing to gain time for their big guns and reinforcements to come from Dacca and other places. At first the Portuguese defenders too were not without hopes of relief by their fellow-countrymen; but the Feringis of Arakan were

involved in a war with the Magh king (their strong ally in the past), and the Goa Government was without ships, men or money. So, in the end, Hughli was left to its fate unaided.

"In their eagerness to buy peace, the civil population of Hughli paid the Mughal general one lakh of rupees as contribution and also surrendered many Muslims who had been made Christians, besides giving up a number of boats. But the deceitful Mughal commander, after these concessions, only raised his demand to seven lakhs of rupees and the total disarming of Hughli. So, the whites set their teeth and decided to fight to the end, and hostilities were resumed.

"Hughli was an open port; it had no fort, no protective wall, no ditch round it. The *nalas* intersecting the soft alluvial soil, when filled with tidal water or the monsoon floods, acted as a sort of natural fosse round the centre of it. Just before the Mughal attack, the Portuguese had hastily run lines of barricades and palisades from house to house to protect their own quarter. But the bamboo poles were knocked down by the ironplated heads of the Mughal war-elephants, and the invaders' artillery set fire to the crowded native huts. The only defensible posts were two substantial Houses of Religion and a few pucca private dwellings, held by determined musketeers.

"The daily firing from the Mughal guns made the suburbs of Hughli untenable. The Portuguese abandoned the village of Bali (close to the ditch in the north), which contained the College of the Jesuits, and here the Mughal officers took up their quarters. Justly afraid of muskets in European hands, Bahadur Khan gave up the attempt to storm the port, but a policy of attrition succeeded in the end. He began to raid the neighbouring villages and places with a Christian population and dragged into captivity the families of the 4,000 Bengali sailors of the Portuguese ships (called *ghurabis*) and other servants of the Feringis who lived there. This step coerced the men themselves into abandoning the cause of the Feringis and coming over to the Mughals, and the defence was paralysed by the utter want of labour to man the boats, supply of troops, and dig the trenches.

"Half way through the siege, early in the month of August, big guns came to the Mughal general from Dacca and other places and also a party of Portuguese under the traitor Martin Afonso de Mello with his own ships. This man now became 'the engineer and Commissary General' of the besiegers and supplied the brain and spear-head of the Mughal attack, especially during the fatal retreat down the river. Some naval attacks were made, but they failed through the superior skill and courage of the defenders. Mines were run under some of the well-defended buildings. The last of them was fired on 9th September with heavy loss to both the sides.

"Thus in the end the situation within the beleaguered port became intolerable. There was no relief within sight. And at last on 14th

September, evacuation was decided on. All the people, i.e. the Portuguese and other well-to-do Christians, embarked in their remaining boats with the utmost secrecy. They could have made a dash down to the sea in safety, but the retreat was mismanaged and conducted without a common leader or plan, each boat moving as it pleased at its own time. The voyage down was one long tragedy. Many of the boats were sunk usually by the shore batteries, and some through the explosion of their powder. The surviving boats made their way through the breaches torn open in the bridge of boats by the exploding ships, and fighting their last duel with Martin Afonso near Betor (south-west of Calcutta) reached safely at Sagar island. Here they were met by relieving ships from Dianga and Goa.

"Those who thus saved themselves numbered about 3,000 souls, namely a hundred and odd Portuguese males and 60 to 70 white women, the rest being natives of the country and slaves. But the losses of the defenders had been heavy. A little over a hundred Portuguese had perished during the siege, mostly in the retreat, the Catholic priests and monks doing the most heroic service. The Muslim court historian boasts that 'ten thousand of the enemy—men and women, old and young, were slain, drowned or burnt, and 4,400 Christians, male and female, were made captives'. We learn that only four hundred Feringi captives, male and female, from Hughli were produced before the Emperor at Agra on 8th July 1633. They were offered the choice between liberty at the cost of apostatizing to Islam and lifelong slavery and chastisement on refusal. 'Some of them agreed to the conversion, but most refused. . . .Those who refused were kept permanently in prison; most of them died in captivity.' (*Pādishāh-nāmah*, iA. 439, 534). Their sufferings are described by Manrique (ii. 325-332). . . .The most reliable figure for the loss on the imperial side that Father Cabral could get by careful inquiry was 4,300 killed including Bengal troops, and 25 *ahadis*. Rumour, no doubt, estimated the number of the dead as high as 30,000 (ii. 419). Abdul Hamid Lahori quotes the official despatch of the imperialists, 'From the beginning to the end of the campaign, a total of ten thousand of the enemy, men and women, old and young, were slain, blown up by gunpowder, drowned in water, or burnt in fire; the imperial army lost nearly one thousand dead.' (*Pād.* i.A. 439)."[117]

During the next few years of Shah Jahan's rule, the imperial administration in Bengal was engaged mainly in mopping up operations against the Portuguese and their allies, the Maghs, in eastern Bengal, and in the re-conquest of Kamrup. Prince Muhammad Shuja, the second son of Shah Jahan, was sent by his father to Bengal as governor of the *subāh* in April 1639 and three years later Orissa was also added to his charge. Prince Shuja's governorship of Bengal lasting for 21 years (April 1639 to April 1660)[118] was a period of comparative peace and a time when the Mughal rule in Bengal attained some administra-

tive stability and introduced methods for a better governance of the province. The most important achievement of Prince Shuja was, however, the reorganization of the land revenue and settlement system in the *subāh*.

When Shah Jahan fell ill in September 1657, and it became apparent that his days were numbered, he named his eldest son Dara Shukoh as his successor. But it was crafty Aurangzib who ultimately succeeded in capturing the throne. The new emperor sent a conciliatory letter to Shuja adding the province of Bihar to his charge, and promising more favours in future. But Shuja was not to be pacified and prepared for war. He was, however, completely defeated at Khajwa on 5 January 1659 by the imperial army led by Aurangzib himself and his ablest general Mir Jumla who pursued Shuja and occupied Rajmahal as also the entire country on the west bank of the Ganges from Rajmahal to Hughli. There followed a year of intermittent warfare between the troops of Prince Shuja and the imperial army under Mir Jumla but eventually Shuja had to fall back into eastern Bengal and was chased out of Dacca in May 1666. This completed Aurangzib's conquest of Bengal and Mir Jumla was entrusted with the governorship of the *subāh*.

During the period of his viceroyalty of Bengal for nearly three years (May 1660 to March 1663), Mir Jumla was mostly engaged in campaigns in Cooch Behar and Assam but his rule was marked by certain events which had far-reaching effects on the history of Bengal in general and that of the region near Hooghly in particular.

"This warrior-viceroy could not deal effectively with certain administrative problems of Bengal, the solution of which had become urgently necessary, especially the rebuilding of the flotilla (*nāwwārā*). With a view to reorganising the navy, Mir Jumla abolished the old system of management, but before he could start a new one, he had to set out on the fatal Assam campaign. Many naval officers and men died in the course of that war and the flotilla was utterly ruined by the time of the death of Mir Jumla. This led to an aggravation of the menace of piracy of the Maghs and the Portuguese and Shaista Khan had to create a virtually new flotilla.

"The basis of Mir Jumla's financial system in Bengal was monopoly. He endeavoured to become the sole stockist of all articles of necessity and then sell them at enhanced prices. About 1660 he offered to supply the English factors every year with as much saltpetre as they required. . . .

"A dispute arose between the government of Mir Jumla and the English factors, as the latter refused to pay either the Rs. 3,000 demanded (1658) by the Governor of Hughli in lieu of annual customs or the anchorage charges demanded in the next year by the faujdar of Balasore. In 1660-61 the exasperated English agent at Hughli audaciously seized a country vessel of the Mir as a security for the

recovery of their debts. The incensed Governor demanded reparation and threatened to destroy the out-agencies, to seize the factory at Hughli and expel the English from the province. However, on the advice of the Madras authorities, Agent Trevisa restored the boat and apologised to the Governor. But the latter continued to exact the annual payment of Rs. 3,000. . . .

"While the Dutch offered help to Mir Jumla against Shuja, the English factors followed a policy of 'wait and see'. The Mir ordered the Governor of Balasore to send up Trevisa to Hughli and to levy a duty of 4% on all English exports, besides anchorage duties on their ships. By the end of November 1659, the trade of the English was practically brought to a standstill. Finally, after an agreement with Trevisa for the restoration of his seized junk and the settlement of the question of compensation by arbitration, Mir Jumla granted him a *dastak* or *parwana* (9th February, 1660) confining the privileges previously granted to the English by Shahjahan and Shah Shuja. As Governor of Bengal, Mir Jumla continued his earlier policy of diluting firmness with opportunism in his dealings with the English."[118]

The break-down of the internal administration of Bengal following Shuja's departure from the province in December 1657 to contest the throne, ended six years later with Shaista Khan's entry into Rajmahal as subahdar on 8 March 1664. This new governor of Bengal was a proved and able campaigner with considerable administrative experience. "But in Bengal he was a tired old man, who left campaigning to his subordinates—especially his many able sons —while he himself spent his days in ease and pleasure amidst his numerous harems. . . .The English merchant William Hedges, who visited him, reported him as 'old and very feeble' (Dec. 1683). . . .We get from this source a picture of Shaista Khan's life in Dacca in an almost royal style of luxury and splendour. He also sent from time to time very costly presents to his master the Emperor. . . .

"Such extravagance could be maintained only by squeezing the people. His subordinates were left free to raise money for him by every means that they could think of; merchandise was stopped at every outpost and ferry and custom duty charged over and over again in disregard of official permits; cesses (*abwabs*) abolished by imperial decree, still continued to be realised in practice. In addition the Nawab practised a monopoly of the sale of salt, betelnut, and some other prime necessaries of life. Thus, by grinding the masses, he amassed a vast treasure, besides building costly edifices at Dacca, the memory of which still lingers. . . .

"The English merchant W. Clavell wrote from Hughli on 15th Dec. 1676—'The Nawab Shaista Khan obtained Hughli as part of his jagir. . . .His officers oppress the people, monopolise most commodities, even as low as grass for beasts, canes (i.e., bamboo), firewood, thatch etc. Nor do they want ways to oppress those people of

all sorts who trade, whether natives or strangers, since whatever they do (at Hughli) when complained of to Dacca, is palliated under *the name and colour of the Nawab's interest. . . .There is sent from Dacca 20 or 40 thousand rupees yearly to be employed (by the Nawab's officers in Hughli) in merchandise, which is distributed among the Hindu merchants of the town, for which they agree to give 25 p.c. per annum.* . . .The governor doth get quantities of gold and other goods at under rates out of the Dutch warehouse. . . .

"Streynsham Master wrote to the English Company in London that Shaista Khan in his less than 13 years' governorship of Bengal had 'got so great a treasure together as the like is seldom heard of nowadays in the world, being computed by knowing persons at 38 crores of rupees, and his income is daily 2 lakh rupees, of which his expenses is about one half.' "[120]

Shaista Khan's tenure in Bengal was interrupted by a year's viceroyalty of Bengal of Prince Muhammad Azam Shah (29 July 1678 to 12 October 1679). The overbearing attitude of this prince was to a great extent responsible for the deterioration of the relations between the Mughal authorities at Dacca and the English merchants at Hooghly. When Shaista Khan returned to Bengal in October 1679 to serve his second term as subahdar (which lasted till June 1688), he found the situation difficult leading, eventually, to a war with the English. To quote Jadunath Sarkar: "The English East India Company had established their first factory in Bengal at Hugli in 1651. . . .At first their transactions in Bengal were on a very limited scale and unprofitable. Before 1651, their annual investment in this province was less than one-tenth of the value of the Dutch Company's. The Civil War in England (1642-1648) and the war between Holland and England under the Protectorate (1652-1654), ruined the business of the old E.I.Co. and the London Directors of the latter Company at one time issued orders for abandoning the trade in Bengal and 'the Bay' altogether. But after 1660, when Aurangzib's final triumph over his rivals restored peace in India and the Restoration of Charles II settled affairs in Great Britain, the English trade with Bengal began to improve rapidly. By 1680 the Company's exports from Bengal had risen to £150,000 in value, and next year to £230,000.

"But in August 1682, when William Hedges arrived at Hugli as the first governor and Agent of the English Company in Bengal (which was now removed from the control of Madras), he found the trade almost brought to a standstill by the lawlessness and greed of the Mughal officials. . . .The Agent and Council made use of diverse expedients for redress of their grievances; but all means proving ineffectual, it was agreed that the only expedient now left was for the Agent to go himself in person to the Nawab and Diwan at Dacca to make some settled adjustment concerning the customs. Hedges spent six weeks in Dacca. . .but nothing resulted from this mission;

Shaista merely promised that he would request the Emperor to give the English a farman, and the local officials at Hughli continued to stop the Company's boats and seize their goods.

"At last the English traders lost all patience with the corrupt and lawless Mughal Government. 'Hedges and others urged upon the (Directors of the) Company that trade in Bengal would never prosper till they came to a quarrel with the native authorities, got rid of the growing exactions, and were established in a defensive settlement with ready access to the sea.' This resolve was to bear fruit in the foundation and fortification of Calcutta before the 17th century was over.

"The Court of Directors obtained from King James II permission to retaliate their injuries by hostilities against Shaista Khan and Aurangzib, and in 1686 ships with troops were sent to India from England for making a vigorous attack upon both sides of the Indian peninsula. Only three of these ships reached Bengal. The English troops arrived by driblets towards the end of 1686, and were quartered in Hugli and near it. These preparations for war could not be concealed from Shaista Khan; he concentrated 3,000 foot and 300 horse at Hugli to guard the town.

"When feelings were thus strained on both sides, it was easy for a small incident to precipitate war. On 28th October 1686, three English soldiers of the Hugli factory, when visiting the bazar of the town for making purchases, were attacked and wounded. The English captain made a sally to rescue them, but this advance was stopped and the huts surrounding the factory were burnt down by the Mughal faujdar Abdul Ghani, who also opened fire with his artillery on the English ships. But reinforcements arrived soon after, and the English stormed the Mughal battery and advancing into the town burnt down much of it. Their ships continued the work, by bombarding the town and sending landing parties to sack it. Early in the day the faujdar fled away in disguise. The English lost two men killed and several wounded and their old factory and its godown were burnt. But on the Mughal side about 60 men were killed and a great number wounded, while four to five hundred houses and a great number of boats were burnt down.

"The Hugli faujdar sought the mediation of the Dutch merchants of Chinsura and opened negotiations with the English, but it was a trick for gaining time to call up reinforcements. The English used the respite to pack their stores and prepare for evacuating Hugli. Shaista Khan on hearing of the sack of Hugli sent vast detachments of cavalry there and ordered the English to be seized. On 20th December the English left Hugli with all their property, and sailing down the river for 24 miles, halted at the hamlet of Sutanuti (the centre of the coast-line of modern Calcutta), from which place their Agent, Job Charnock, continued the negotiation with Shaista Khan, who merely

temporised. In February 1687, the subahdar threw off the mask and threatened the English with expulsion. On 9th February, Charnock left Sutanuti and captured the imperial forts at Thana (modern Garden Reach, facing Matia Burj), a few miles west of Calcutta and down the Ganges, and seized the island of Hijli, on the east coast of Medinipur district (Contai subdivision), where the English established themselves after landing their men and guns. Next month (March), a detachment of 170 English soldiers and sailors landed at Balasore, took the Mughal fort and burnt down the two towns, called Old and New Balasore.

"About the middle of May 1687, Abdus Samad, a lieutenant of Shaista Khan, arrived before Hijli with 12,000 men to expel the English. From the mainland in the west his heavy batteries fired across the Rasulpur river on the English position in the island and drove their ships from their anchorage. On 28th May, a body of 700 Mughal cavalry and 200 gunners crossed the river above Hijli, seized the town and set it on fire. But the deadly malaria of the climate did Abdus Samad's work. Of the small English army two hundred had died of disease and only a hundred men, weakened by fever, survived, while only five were left alive out of their forty officers. Their provisions also ran out. But they tenaciously held on and continued the fight. At last Abdus Samad sued for peace. On 11th June, the English evacuated Hijli, carrying away all their artillery and munitions.

"On 16th August 1687, Shaista Khan issued a letter permitting the English to build a fort at Uluberia (20 miles south of Calcutta) and renew their trade at Hughli. So, Charnock with his ships returned, but halted at Sutanuti (September). But a new difficulty arose on account of the English war on the Mughal shipping on the Bombay coast (by Sir J. Child) and Shaista Khan finally withdrew his concession. A year was wasted in this way, and on 8th November 1688 the English evacuated Calcutta a second time, abandoning all their stations and business in Bengal.

"Their new Agent, the naval Captain Heath (who had superseded Job Charnock), now sailed to Balasore, stormed the Mughal fort (29th November), and seized New Balasore town, committing unspeakable atrocities on the inhabitants, Christians and non-Christians, men and women alike. On 23rd December, he sailed away to Chatgaon, wishing to seize that town and make it an independent fortified base of the English in the Bay of Bengal. But at last giving up this idea, he sailed away for Madras (17th February 1689), abandoning all his Bengal projects.

"By this time Shaista Khan had left Bengal (June 1688) and Aurangzib, too, had issued orders for conciliating the English and restoring their trade in his dominions, which made a fair addition to his customs revenue. The next governor of Bengal wrote to the supreme Agency at Madras to send a discreet envoy to Dacca for

making a settlement with him. This letter was received on 3rd January 1689. On 2nd July Ibrahim Khan, immediately after coming to Bengal as viceroy (in the place of Khan-i-Jahan Kokah, dismissed after eleven months' tenure), wrote to the Madras Council inviting the English to return to Bengal and promising them fair treatment, and this letter was received on 7th October.

"At last in February 1690, peace was finally concluded between the Mughal Government and the English on the West Coast, and on 23rd April the Emperor wrote to Ibrahim Khan to let the English trade freely in Bengal as before So, the Madras Council decided to send Job Charnock back to Bengal as Agent. He arrived at Sutanuti on 24th August 1690. This was the foundation of Calcutta. In the same year the French made a humble but independent settlement of their own at Chandernagore, in a purchased village."[191]

It was in June 1688 that Shaista Khan finally left Bengal. He was succeeded as governor of the province by Bahadur Khan (July 1688 to June 1689), and then by Ibrahim Khan during whose rule (1689-1697) took place the rebellion of Shova Singh, "a rising which for the first time broke the deep peace that Bengal had enjoyed since the accession of Shah Jahan."[192]

"Shova Singh, a zamindar of Cheto-Barda in the Ghatal-Chandrakona subdivision of Medinipur, took to plundering his neighbours about the middle of 1695. Rajah Krishna Ram, a Panjabi Khatri, who held the contract for revenue collection of the Burdwan district, opposed the brigand with a small force but was defeated and slain (*c.* January 1696). His wife and daughters were captured by Shova Singh, who took the town of Burdwan itself with all the Rajah's property. With the vast wealth thus gained the rebel leader greatly increased his army, took the title of Raja, and began to plunder and occupy the neighbouring country. Rahim Khan, the leader of the Orissa Afghans, joined him and greatly increased his military strength. . . .

"Nurullah Khan, the faujdar of West Bengal, was ordered to march against Shova Singh. But their unchecked success had greatly swelled the ranks of the rebels and heightened the terror of their arms. Nurullah, whose main business had been private trade, timidly shut himself up in the fort of Hughli, which the rebels soon surrounded. On 22nd July 1696, the cowardly faujdar and garrison fled away from Hughli by night, and a detachment of Shova Singh's army entered the town and plundered it. But the Dutch of Chinsura, at the appeal of the faujdar and the fugitive notables of Hughli, sent 300 of their soldiers to attack that town on the land side, while two of their ships sailed up and bombarded the ramparts from the river. At this the rebel garrison (200 horse and two to three hundred foot) escaped from Hughli by the back door. But the country on the west bank of the Ganges continued in the hands of the rebels; they made

daily raids on villages up to the very walls of Chandernagar, and fought the Government of jagirdars' men who opposed them. In this way Shova Singh built up a State of his own some 180 miles in length along the bank of the Ganges with Hughli in its middle, and levied tolls and custom duties on the river traffic.

"After his expulsion from Hughli (end of July 1696), Shova Singh retired to Bardwan, leaving Rahim Khan in command. At Bardwan in making an attempt upon the honour of Raja Krishna Ram's daughter, Shova Singh was stabbed to death by that heroic girl, who next plunged the dagger into her own heart. His brother Himmat Singh succeeded him, but he was a worthless voluptuary, and the rebel army chose Rahim as their chief, who crowned himself, taking the title of Rahim Shah. Rahim's army had now increased to 10,000 horse and 60,000 infantry—really a vast medley of vagabonds and adventurers of all kinds. By way of Nadia he advanced to Makhsusabad (modern Murshidabad). ... Rahim took and plundered Makhsusabad. ... Smaller bands spread all over the country, looting, burning and forcing the people to join them. Before the end of this year, he took Rajmahal, and in March 1697 Malda itself ... But the threat to Hughli city and the disorder in the district around continued till April 1697.

"Then the tide began to turn. Immediately on getting full reports of the rising and Ibrahim Khan's negligence, the Emperor dismissed him from the viceroyalty and appointed his grandson Azim-ud-din to Bengal (middle of 1697). Pending the Prince's arrival, Ibrahim Khan's son Zabardast Khan was ordered to take the field against the rebels without delay. This energetic and capable young general, getting together what men and guns he could gather in a short time, arrived in the Murshidabad district. Rahim Khan formed an entrenched camp on the left bank of the Ganges at Bhagwangola, which was suddenly attacked by Zabardast. The imperial artillery, well served by Feringi gunners, made havoc in the crowded ranks of the rebels and silenced their guns. After a two days' fight the Afghans were routed and their camp captured (May 1697). Detachments of the imperial cavalry made a rapid detour and recovered Rajmahal and Malda, while Zabardast Khan, after his victory on the Ganges, resumed his march and drove Himmat and Rahim successively out of Makhsusabad and Bardwan back into the jungle of Chandrokona. ..." In November, the Prince (Azim-ud-din) arrived near Bardwan. Zabardast Khan was received with so much coldness and slight after his splendid victories that he resigned his command in disgust, and left Bengal along with his father for the imperial camp in the Deccan (January 1698).

"Zabardast Khan's retirement greatly weakened the Mughal army in Bengal. The rebels now came out of their jungle retreats and renewed their raids on all sides. Rahim, after again plundering the

Nadia and Hughli districts, arrived near Bardwan. Here the Prince vainly tried to pacify him by negotiation. But the treacherous Afghan lured the Prince's chief minister Khwaja Anwar to a friendly interview and there slew him. Then at last the Prince sent his army against the rebels, who were defeated near Chandrakona and their leader Rahim was beheaded by Hamid Khan Qureshi. . . . The leaderless rebel army melted away; some of the men were taken into Mughal service, the rest returned to their homes and tillage."[123]

Growth of military power of foreign traders

These disturbances had a direct bearing on the growth of military prowess of the European traders in Bengal, especially in their settlements at Calcutta, Chandernagore and Chinsura.

"When public order disappeared and the Mughal administration collapsed, the three European settlements in Bengal—Calcutta, Chandernagar and Chinsura applied to Ibrahim Khan at Dacca for permission to fortify their factories. The viceroy in general terms ordered them to defend themselves. This was the beginning of Fort William, Fort D'Orleans, and Chinsura ramparts. . . . At Chandernagar Francois Martin in November 1696 raised palisades round the French *loge* and also a bastion of earth on the side facing the river; and in April 1697, he built a second bastion for flanking the four curtains of Chandernagar 'which thus assumed the aspect of a small fortress.' Similarly, the Dutch fortified their factory in Chinsura with walls. All three nations enlisted temporary bands of Indian soldiers, —Rajputs and 'Baksarias', to augment their handful of white soldiers and sailors. Then was seen a spectacle which no Indian can remember without shame: the sovereign of the country could not protect his subjects, and every Indian of wealth and every Government official of the neighbourhood who could, took refuge in these forts of foreigners to save their lives and honour."[124]

Rise of Murshid Quli Khan

In the early years of the 18th century events took a certain turn which ultimately led Bengal to break away from the Mughal Empire and become an independent State with its capital at Murshidabad. The career of the founder of this Nawabdom, Murshid Quli Khan, and the way in which he rose to power are too well known to be recounted here. An interesting episode in his career while he was still an official of the Mughal Government between 1711 and 1713 should, however, be taken note of as it had some bearing on the development of the town and port of Hooghly and on Murshid Quli's attitude towards the European powers when he became the master of Bengal.

"After his reappointment as diwan in February 1710, he moved the imperial Court and secured (on 11th Sept. 1711) an order placing the collectorship of customs at Hughli port and the faujdari of the Midnapur district, then held by Ziauddin Khan, again under the provincial diwan's control, from which they had been removed and placed directly under the Central Government two years before. . . .

In pride of his high connections, Ziauddin publicly defied and slighted the upstart diwan of Bengal. . . . When Murshid Quli's agent Wali Beg approached Hugli, Ziauddin refused to give up his charge or to render accounts of the custom collections during his tenure, but entrenched himself with his followers. Wali Beg established his own camp near the tank of Devidas, a mile and a half in front of his rival's position, outside Chandernagar. Here the two parties remained quarrelling for over a year, but only light skirmishes were fought by a few men. Ziauddin secretly bought arms and hired mercenaries from the French and Dutch traders of the neighbourhood. The English of Calcutta wisely stood neutral, and repeatedly tried to effect a friendly compromise between the two parties, but without success. On 10th November 1712, Mir Abu Turab arrived near Hugli at the head of reinforcements sent by Murshid Quli, but could not dislodge Ziauddin from Hugli. At last on 22nd April 1713, the dismissed officer received news that the Emperor had appointed him diwan of the western Karnatak, and he left Hugli at the end of June when Murshid Quli's representative got possession of the port."[125]

Murshid Quli's revenue policy

On his appointment as the permanent *Diwān* of Bengal, Murshid Quli thoroughly reorganized the revenue system of the province and left it in the form in which the British administration inherited it. Jadunath Sarkar, however, has sharply criticized some of his economic measures. These observations being related to the history of the Hooghly district are worth quoting here.

"Aurangzib's letters to Azim show that the Bengal surplus revenue was despatched to the imperial camp in coin, loaded in carts, as bills of exchange could not be obtained for such vast sums and the rate of discount also was high. This unceasing drain of silver from Bengal, amounting on an average to one crore of rupees every year, kept the volume of true money in circulation here extremely small and the price of local produce very low. Hence, it is no wonder that while Sebastien Manrique, about 1632, found rice selling at Murshidabad at four to five maunds a rupee, ninety years later, in Murshid Quli's time, the price of rice there was still commonly four maunds. This fact proves that the circulating medium had not increased in a century's time, in spite of the growth of production and trade. The common people had no economic staying power, no capital, because they could not accumulate any true money or silver coins as savings, though the area under tillage had increased. . . .

"The land revenue was forced up so high only by the heartless squeezing of the peasantry and inhuman torture of the contractor collectors. The pressure applied by the Nawab at the top naturally passed through the intermediate grades finally on to the actual cultivators, who were left with the bare means of existence, but every portion of the annual increase of the fields and looms above that minimum was taken away by the State. Thus, while the luxury of

Delhi and Murshidabad was pampered, and Murshid Quli every year buried a new hoard in his treasure-vaults, the mass of the people browsed and died like human sheep. The gold, pearls and gems piled up in the Treasure Chamber of the Murshidabad palace, which dazzled the eyes of Colonel Clive when he entered the Nawab's capital after his victory at Plassey, did not enrich Bengal itself in any way. . . . There was money in the hands of some people, but only under the protective wings of the European traders in Calcutta and Chinsura, and to a lesser extent in the neighbouring cosmopolitan town of Hugli. . . . 'Jafar Khan being sensible that the prosperity of Bengal depended upon its advantageous commerce, showed great indulgence to merchants of every description, but was, however, rather partial to the Mughals (i.e. Persians). The encouragement which was given to trade by him, who directed that nothing but the established rate of duties should be exacted, soon made the port of Hugli a place of great importance. Many wealthy merchants who resided there had ships of their own, on which they did trade to Arabia, Persia and other countries.' (Salimullah).

"In fact, Hugli became a Shia colony and a centre of Shia theology and Persian culture before the full growth of Murshidabad. And even afterwards, this cosmopolitan port was preferred to the political capital as a residence by those Persian emigres who had no employment or family ties to keep them at Murshidabad. Not only Shia teachers, but many Persian physicians and perfumers settled at Hugli, attracted by the large number of rich patrons in that town and in its neighbouring district, because the Arabic medical science was then in high favour all over the east."[126]

Administrative changes

Before we come to the close of Mughal rule in Bengal, it is necessary to recapitulate briefly the then administrative set-up in Bengal with special reference to the district of Hooghly. In O'Malley's words: "This period witnessed several important administrative changes. Three settlements of land revenue took place, viz., (1) in the second half of Prince Shah Shuja's rule (1649-58), (2) in the time of Murshid Kuli Khan (*circa* 1722), and (3) in Shuja-ud-din's time (*circa* 1728). The first made no material change in Todar Mal's rent-roll, but radical reforms were introduced by Murshid Kuli Khan. He divided Bengal into 13 *chāklās* instead of *surkārs*, the *parganās* being retained, but in some cases subdivided. Under this arrangement Hooghly district fell under two *chāklās*, Hooghly or Satgaon and Burdwan. In the revised rent-roll of Shuja-ud-din's time, the country was divided into *khālsā* lands consisting of (1) large and small zamindars and *sayār* or customs, etc., and (2) the *jāgirs* of the *Faujdārs*. Hooghly district was apparently divided between the large zamindari of Burdwan and the small zamindaris of Mandalghat, Arsa and Muhammad Aminpur, and was assessed to *sayārs* of *baksh-bandar*, i.e., port dues and ground rents.

"The Emperor Aurangzeb, always suspicious of his proconsuls, set up a dual government in Bengal by appointing a Diwan. The military and political administration was controlled by the Nawab Nazim; but the revenue and financial administration was placed in the hands of the Diwan, who was appointed directly by the Emperor. Both were to be guided by rules and regulations laid down in the *Dastur-ul-Amal*, i.e., a code of procedure periodically issued under the Emperor's orders. This dual government was practically abolished in 1707, when the Diwan Murshid Kuli Khan secured the post of Deputy Nazim, and ceased a few years later when he became Nawab Nazim of Bengal and Orissa. Bihar was added to Bengal in the time of Nawab Shuja-ud-din, who divided his satrapy into four divisions: (1) West Bengal, (2) East Bengal, (3) Bihar and (4) Orissa. The first division the Nawab kept under his direct charge; and each of the other divisions he placed under a Deputy Nazim.

Faujdārs of Hooghly

"Hooghly was under a *Faujdār* or Military Governor, assisted by a Naib of the Diwan, called the Comptroller of Customs, or the Deputy Governor, in the English Factory records. The following *Faujdārs* of Hooghly can be traced. Malik Beg was in charge from 1647 to 1667, but apparently not continuously, for in 1664 we find one Muhammad Sharif, who was deputed to fortify Sangramgarh before the conquest of Chittagong by Shaista Khan, described as the late *Faujdār* of Hooghly. Malik Kasim, the son of Malik Beg, was twice Governor, viz., in 1668-72, and again in 1674-81. He is referred to unfavourably in the English records for having interfered with their trade and exacted money from them. He seems to have been succeeded by 'Suffede' Mahmud, whom William Hedges, the English Agent, met at Dacca in November 1682. The latter was probably replaced by Malik 'Burcoordar' (Barkhwardar), who threatened to proceed against Hedges on a complaint made by one Thomas Haggerston in November 1684, and was subsequently deputed by the Nawab to negotiate with Job Charnock. The *Faujdār* at the time of the first 'eruption' of the English in Hooghly town (October 1686), was Abdul Ghani; and in June 1704, one Mir Ibrahim was the Governor. In the middle of 1708, Zia-ud-din Khan (Zeaude Cawn of the records), was appointed Governor direct by the Emperor and took charge in May 1710. He was friendly to the English and other Europeans, but was on bad terms with Murshid Kuli Khan, who selected Mirza Wali Beg as *Faujdār* on his own authority. The two took up arms to support their claims, the struggle ending in the defeat of Wali Beg. Eventually, Zia-ud-din retired in June 1713, on being transferred to Coromandel as Diwan."[137]

As for subsequent events under the successors of Murshid Quli Khan and the parts played in them by the *Faujdārs* of Hooghly, O'Malley has left the following account: "In the time of Murshid Kuli Khan, *Faujdār* Ashan-Ullah Khan, attacked the Bankibazar

factory of the Ostend Company in 1723 and captured it. Of this Governor a story is told that he had a favourite *Kotwāl* (the city police officer), who enticed away the daughter of a Mughal. Ashan-Ullah Khan tried to screen him, but the Mughals complained to the Nawab, Murshid Kuli Khan, who had the *Kotwāl* stoned to death. Ashan-Ullah Khan was transferred by order of the next Nawab, Shuja-ud-din, who conferred the post on an old friend Pir Khan alias Shuja Kuli Khan. The new *Faujdār's* rapacity brought him into collision with the English, Dutch and French, and is said to have ruined the port of Hooghly. On one occasion his confiscation of some English goods led to the despatch of British troops from Calcutta.

Ali Vardi Khan

"The *Faujdār* last named held office till 1740, when he took part in the battle of Gheria, throwing in his lot with the Nawab Sarfaraz Khan, against the ambitious Ali Vardi Khan. The victory of the latter won for him the mastery of Bengal and ushered in 25 years of war, during which the land had little peace. He followed up his victory by marching through Arambagh and Midnapore to Orissa, where he defeated Murshid Kuli Khan II, Governor of Orissa and Sarfaraz Khan's brother-in-law, and then seized that province. Shortly afterwards Mir Habib, with the adherents of Murshid Kuli, revolted and imprisoned Ali Vardi Khan's Governor, whereupon the Nawab again marched south and quelled the rebellion. While marching leisurely back, he was met and surrounded at Burdwan by a Maratha army under Bhaskar Pandit. He lost most of his baggage, artillery and tents, and his half-starved army had to cut their way through to Katwa. The Marathas then spread over West Bengal, one body seizing Hooghly.

"Mir Habib had for some time been negotiating with the merchants of Hooghly, and in particular with two named Mir Abul Hasan and Mir Abul Kasim, who were on familiar terms with the Governor. These two merchants helped Mir Habib in the stratagem by which he took the town. Coming one night when the fort gates were closed, they sent word that they had important news for the Governor. On this, the gates were opened and Mir Habib with 15 men got in and seized the Governor. They then sent word of their success to a Maratha general, Sib Rao, who was waiting close to the town with a body of troops. Sib Rao at once marched on Hooghly, which quietly submitted, and was appointed Governor of the town. . . .

"In October 1742 Bhaskar Pandit, who had begun to collect revenue from the zamindars, was defeated at Katwa by Ali Vardi and driven out of Bengal. Next year Bhaskar's master, Raghuji Bhousla of Nagpur, and Balaji Rao, the head of the Marathas at Poona, advanced to Bengal with large armies, both of which mercilessly plundered the towns and villages of West Bengal. Ali Vardi prevailed upon Balaji and then advanced with him against Raghuji, who fled

before the combined force. In 1744 Bhaskar Pandit returned. The Nawab invited him and his generals . . . and had them murdered; he then routed the disorganized Maratha forces and drove them out of Bengal.*

"No sooner was Ali Vardi Khan free from the menace of the Marathas than he had to face a formidable revolt of his own Afghan officers. . . . Ali Vardi Khan, wearied by constant warfare and his extreme old age, made peace with the Marathas in 1751, ceding to them Orissa up to the banks of the Subarnarekha river and agreeing to pay 12 lakhs of rupees as *chauth* for Bengal. From this time till his death in 1756 the land had a little breathing space; but in the meantime the wars had caused immense destruction of life and property. . . .

Siraj-ud-daula

"The successor of Ali Vardi Khan, the hot-headed young Siraj-ud-daula, declared war against the English, the quarrel ending in his capture of Fort William. . . . In January 1757 Colonel Clive and Admiral Watson, having come up from Madras with a considerable force and reoccupied Calcutta, sent an expedition against Hooghly, which sacked the town. After an indecisive battle they forced the Nawab to make a treaty, and next attacked and captured the French fort at Chandernagore. In June of the same year the battle of Plassey made the British supreme in Bengal. After this the district had peace with the exception of one short interlude in 1759, when an English army under Forde met and defeated a Dutch force at Biderrah near Chandernagore.

"The secret treaty with Mir Jafar Khan, accepted by him on June 3rd, 1757, laid down in its twelfth clause that the 'Moors' should not fortify the river below Hooghly; and the actual cession of the district to the British was the result of the secret compact concluded by the Calcutta Council under the Governor, Mr. Vansittart, with Mir Kasim Ali Khan, son-in-law of Mir Jafar, by which they agreed to put him in executive charge of the Nizamut. Its fourth and fifth clauses stipulated that the Company should keep up a standing army for the defence of the government and the provinces, and that to keep up the said force the countries of Burdwan, Midnapore, Chittagong, and half the annual produce of lime at Sylhet, should be ceded to the Company in perpetuity. Though the treaty was signed on the 27th September 1759, the ceded lands did not become subject

* K. K. Datta (*Alivardi and His Times*, Calcutta, 1963. p. 55) has given the following account of the capture of the Hooghly fort by the Marathas: "Mir Habib next thought of taking possession of the rich town of Hugli, which was, both politically and commercially, of great importance. . . . He formed a conspiracy. . . . to capture the Hugli fort. The defence of the fort was sadly neglected by the Nawab's *faujdar*, Muhammad Raza Khan. . . . On an appointed night Mir Habib with 2,000 Marathas under Sis Rao appeared before the gate of the fort. . . . Under the influence of liquor, Muhammad Raza ordered the gate of the fort to be opened and to admit Mir Habib. The Marathas then rushed inside the fort, brought it under control, and put the officers of the Nawab in chains. . . . The next morning Sis Rao was installed as the Maratha Governor of Hugli."

to the Company till a year later, viz., in September 1760. The Hooghly district, which was then included in *Chāklā* Burdwan, thus passed finally into the hands of the British; though their *de facto* possession was not ratified *de jure* till August 1765, when the Emperor Shah Alam made a perpetual grant of the *diwāni* of Bengal, Bihar and Orissa. The Nizamut, or rather the criminal branch, remained under the Nawab up to 1772, when Hastings transferred the central authority to Calcutta.

"There is little record of the *Faujdārs* of Hooghly during the last days of the rule of the Nawabs. When Ali Vardi Khan seized the throne, he put his step-brother, Muhammad Yar Khan, in charge of Hooghly port; and it was his deputy, Mir Muhammad Reza, who was imprisoned by the Marathas in 1742. The Maratha Governor Sib Rao, appointed in his place, did not stay long, for on the defeat of Bhaskar Pandit he retreated to Bishnupur in October of the same year. In February 1757, the well-known Nanda Kumar was *Diwān* and acted as *Faujdār* of Hooghly. Mr. Watts, through Umichand, offered him Rs. 10,000 to Rs. 12,000 on condition that he gave no assistance to the French—a condition fulfilled by him—and later on dangled before him the prospect of being confirmed permanently as *Faujdār*. Watts apparently could not carry out his promise, and at the critical time of Clive's march to Plassey, Sheikh Amin-Ullah was Governor of Hooghly. Clive threatened to destroy Hooghly, if he was opposed, on which Amin-Ullah tamely submitted. Muhammad Umar Beg Khan was *Faujdār* in 1759, and was directed by Mir Jafar to assist the English against the Dutch. Ten years later the *Faujdār* of Hooghly invested the Dutch fort at Chinsura, both by land and water, for non-payment of custom duties. The blockade lasted ten days and was raised at the intervention of the English Government, on the request of the Dutch Council, which promised to pay the amount due."[128]

MODERN PERIOD

Alivardi Khan, who had been the subahdar of Bengal and Bihar, died in April 1756 and was succeeded by his favourite grandson Siraj-ud-daulah who, thinking that he was surrounded by enemies, launched a number of expeditions during his short tenure of rule which affected the history of Hooghly and neighbouring areas.

"On the eve of Alivardi's death Siraj and his cousin Shaukat Jang stood face to face as rivals for the throne of Bengal, Bihar and Orissa. But Shaukat Jang lived far away, in Purnia. Siraj's nearest and greatest enemy was his mother's eldest sister Ghasiti Begam, a childless widow. . . . It had been her ambition to raise Siraj's younger brother Akram-ud-daulah to the throne, and rule the country as his regent from behind the veil; but that boy had died about a year before Alivardi. She then turned her eyes to Shaukat Jang and invited him to invade Murshidabad. Thus every enemy of Siraj

found a patron in Ghasiti Begam. ... But the most formidable enemy of Siraj was Mir Jafar Ali Khan, the commander-in-chief of Alivardi's army. By reason of his mature age, experience of war and official position, he was the only man whom Siraj had reason to dread in a trial of strength."[129]

It was natural that one of the first tasks of Siraj "was to disarm Ghasiti Begam by robbing her of her wealth. ... The new Nawab made a change of officers, placing his own partisans in the important posts. ... Mir Jafar was removed from supreme headship of the army (*bakshi*) and the post was given to the brave and devoted Mir Madan. Another faithful and capable officer was Mohan Lal, the Kashmiri whom he made *peshkar* of his diwan-khannah, with the title of Maharajah, and a degree of influence which turned him in effect into the prime minister (April 1756)."[130]

Siraj-ud-daulah next turned his attention to Shaukat Jang and started on an expedition for Purnea in May 1756 but on receiving a message of allegiance from him on the way, returned to deal with the British, who had given asylum to Krishna Ballav, the son of Raj Ballav, whom he had imprisoned for treason, and were reported to be fortifying Calcutta. Siraj captured Calcutta after a battle lasting for four days (16-20 June 1756), and was temporarily free to turn his attention once more to Shaukat Jang. In the battle of Manihari, on 16 October 1756, Shaukat Jang was killed and his army routed. Siraj became more confident of his position by virtue of a farman from the Delhi Emperor confirming him in the subahdari of Bengal, Bihar and Orissa, in return for a heavy tribute. In course of the subsequent events leading up to the battle of Plassey the district of Hooghly and its vicinity became the theatre of momentous happenings. The excellent account given by Jadunath Sarkar of the re-capture of Calcutta by Clive, his push into Hooghly and the fall of Chandernagore, and the final confrontation between the parties is best related in his own words. "And now strong forces, military and naval, the British king's and E.I. Company's, led by Col. Clive and Admiral Watson, began to assemble at Falta on the 15th of December. On the 27th of that month the expedition started from Falta. ... A land force under Clive marched up the left bank of the river and reached Calcutta on the 2nd of January 1757. But that city had been already taken possession of by a party from the ship of Admiral Watson. ...

"A manifesto was issued by Clive and Watson, declaring war on the Nawab and giving the reasons for it (3rd January). A week later Clive formed a fortified camp near Baranagore, and on the 10th stormed the Mughal thanah of Hugli, the soldiers and sailors sacking that town and plundering and burning the villages around. The Nawab reached Hugli on 19th January, and the English fell back on Calcutta to their Barnagore camp. On 3rd February, Sirajud-daulah arrived outside Calcutta and encamped in the northern

suburb, he himself in Amir Chand's garden. Under him were 40,000 horse and 60,000 foot with 30 guns. The British army numbered 711 European infantry and 100 artillerymen, with 1,300 sepoys and 14 guns. Negotiations for peace were started but half-heartedly. On 5th February Clive delivered a surprise raid on the Nawab's camp early in the morning. . . .

"In this action the British lost 57 men killed and 137 wounded, besides abandoning two guns; the Nawab's side suffered 1300 casualties. But though 'this skirmish was much more bloody than the decisive battle of Plassey,' it was not fruitless. The Nawab felt fully insecure in the neighbourhood of the English, retired to the salt lakes (modern Dhakuria) and renewed peace parleys in earnest. Only four days later, a treaty was signed, by which the E.I. Company's trade rights and factories were restored, and restitution and money compensation promised by the Nawab for the losses of the Company and its servants and tenants, and the English were allowed to fortify Calcutta and to coin *sicca* rupees.

"Having thus neutralised the Nawab, Clive in the development of his far-sighted policy, promptly turned to crushing the French power in Bengal, so as to leave no European rival capable of assisting the Nawab in future. . . .The English lost no time. Their land and sea forces moved up against Chandernagore. On 12th March, Clive encamped two miles from that town, and on the 14th attacked and drove in their outposts. Chandernagore was really in no defensible condition, though its Director (chief) Mons. Renault had done all that was in his power, in his utter want of money, men, and trained officers. His garrison was hopelessly inadequate against a European enemy. . . .The fort within Chandernagore, named Fort d'Orleans, was a square, 600 feet on each side, built of bricks, flanked with four bastions of 16 guns, without outworks, ramparts or glacis. . . .Inadequate as the fortifications were, the difficulties of the defenders were increased by their 'unwise wish to defend the town, which led to a great waste of time in erecting outposts and barriers in the principal street at some distance from the fort.' . . .Vessels had been sunk in a narrow part of the Ganges, below the eastern face of the fort, in the hope of preventing the English ships from coming up alongside; but this work had not been completed, and in the actual attack the English admiral overcame this obstacle, by sending up small vessels and carefully piloting them.

"Hostilities began on the 14th of March, when Clive drove in the outposts (at night), and then waited for the coming of his ships. In the evening of the 17th, Sub-Lieutenant Cossart de Terraneau, who commanded the French artillery, deserted to the English, and the information which he supplied enabled them to direct their bombardment with the greatest destructiveness to the vital points of the defence works. 'He was the only French artillery officer, and

so his desertion was a serious loss to his countrymen.' But the French from within fought on regardless of the odds. Early in the morning of the 23rd, Clive stormed the French battery which commanded the river passage, and three British ships of light burden passed the sunken ships without any difficulty. For two hours or more there ensued a terrible cannonade between the ships with their 100 guns and the hopelessly outclassed and outnumbered French batteries. Two of the English ships were severely damaged, 'but the walls of Fort d'Orleans were in ruins, the gunners almost all killed, and the men were being shot down by Clive's musketeers from the roofs of the neighbouring houses. ... In this single day's fighting the French lost two Captains and 200 men in killed and wounded. About half-past nine Renault hoisted the white flag.' Articles were signed by which the French lost their military power and even independence in Bengal, and the English were left without a rival in the province. ...

"From the fall of Chandernagore to the battle of Plassey lay a period of exactly three months, during which a relentless Fate seemed to be dragging a blind Siraj-ud-daulah on to destruction. Clive's capture of Chandernagore 'deprived the Nawab of his natural (and only capable) allies against the English; and nothing can extenuate his folly in allowing their destruction.' ..." About this time, the sack of Delhi by Ahmad Shah Abdali led to the apprehension of his pushing eastwards to Bengal which prompted the Nawab to cultivate good relations with the English. But with the retirement of the invader from Delhi, Siraj-ud-daulah "began to protect Mons. Jean Law and the French fugitives from Chandernagore at Qasimbazar. This policy alarmed the English, who now decided to overthrow Siraj-ud-daulah and set up a friendly Nawab on the throne, so that they would be sure of their defence if a strong French force from the Deccan under a general of Bussy's capacity invaded Bengal to restore the French power. 'It was becoming apparent (at Calcutta) that many persons besides the English had cause to fear Siraj-ud-daulah and desired a revolution in the government. The chief people in this movement were Hindus...Siraj alienated all the principal men of the darbar. The great Hindu bankers, the (Jagat) Seths...had been threatened with circumcision,' and Rai Durlabh the former *diwan* and Mir Jafar the former *bakshi* had been deprived of their offices and humiliated. The Seths took the leading part in organising this plot for purifying the administration, as after the fall of Shaukat Jang the English were found to be the only power that could deliver the country from this insane and cowardly tyrant. Towards the end of April, the Calcutta Council began to get promises of co-operation from important personages, especially Mir Jafar, and on 1st May the Council agreed to a secret treaty with Jafar, promising to place him on the throne on the following conditions: 'an alliance, offensive and defensive; the surrender of all French fugitives and

factories; restitution of all English losses, public and private, caused by the capture of Calcutta; the admission of all *farman* rights, liberty to fortify Quasimbazar and Dacca (factories); no fortifications to be erected (by the Nawab) below Hugli; the recognition of English sovereignty within the bounds of Calcutta; the grant of territories for the maintenance of a proper military force; extra-ordinary expenses while the troops were on campaign for the Nawab to be paid by him; and the residence at the Nawab's darbar of one of the Company's servants.' . . .On the 11th June the treaty was delivered to the Select Committee at Calcutta. . . .On the 13th June Clive began his march on the Nawab's capital, with an army of 3,000 men; of whom only 800 were Europeans, and the rest sepoys and half-caste gunners. Leaving his camp in the French Gardens outside Chandernagore (now in British occupation), he awed the Nawab's faujdar of Hughli into inaction, and sent a letter of complaint to the Nawab, in which he maintained silence about his intention to fight. His sepoys marched by land, and white troops and Eurasians by boat. On the 17th the army reached Patli. On the 19th a detachment sent by him under Major Eyre Coote took Katwa fort, which the enemy deserted at his approach. This place commanded the high road to Murshidabad and it also contained a very large quantity of grain. The rest of the English army arrived at Katwa late that night and halted for two days. Clive was filled with anxiety as he gazed at an uncertain future. 'Up to this time he had received nothing but bare promises from Mir Jafar, . . .and he hesitated to risk the fortunes of the Company on the bare word of a man who was a traitor to his own sovereign.' So, he at first thought of holding his present position at Katwa (instead of crossing the Ganges and advancing on Murshidabad), till the end of the rainy season. . . .But Clive changed his mind and decided to advance next day without caring whether he received any assurance of junction from Mir Jafar or not. On the 22nd the English army set out from Katwa, crossed the Ganges and after a long toilsome march in rain and heat, reached Plassey about midnight. Here they made contact with the enemy."[181]

The actual course of the battle of Plassey and the events immediately following it are too well known to bear any repetition here. Clive reached Murshidabad on 29 June 1757 and placed Mir Jafar on the throne with the sanction of the Mughal Emperor, Alamgir II, in the form of a *farman*. "Thus, within one year the English raised themselves from the lowest to the highest position. As a fitting reward of the services performed by Clive the Court of Directors appointed him the first Governor of the Company's settlement in Bengal. He entered upon the duties of his high office with his usual ability, energy, and earnestness, and, before he left for England, had dispersed the army of the Imperial Prince, arrested the progress of the French in the Deccan and defeated the Dutch, whose

settlement at Chinsura existed thenceforth only on sufferance."[132] The contention implied in the passage quoted above that the battle of Plassey marked a turning point in the history of the English in Bengal has been challenged, among others, by W. K. Firminger. "When the actual benefits by treaty which the victory at Plassey secured to the Company are considered, their comparatively trifling character is very striking. Already Siraj-ud-daula, by the treaty of February, 1757, had consented to that purchase by the Company of the *talukdari* rights in the thirty-eight villages which the Emperor Farrukhsiyar had sanctioned in 1717—a purchase which the astute Nawab Murshid Khan had prevented. The addition to the English Zamindari of the Twenty-four Parganahs conceded by Mir Jafar was little more than what his ousted predecessor had consented to. Again, as to the Company's trading privileges, it was an essential point in Governor Vansittart's position in 1760 to demonstrate that the victory at Plassey had been productive of no fresh privileges for English commercial enterprise."[133] Firminger also argued that the Company's policy of not taking upon itself the burden of territorial sovereignty remained unchanged even after the battle of Plassey. "It is true to say that neither Plassey nor Buxar were fought to win territorial sovereignty for the East India Company or for the British Crown, although, of course, those battles were fought to maintain on the *musnud* of Murshidabad a ruler powerless to uproot the British factories. Although on some few occasions both the Court of Directors in London and their representatives in Bengal did assume a bellicose tone, and although there were occasions when territorial acquisitions were distinctly coveted, yet we find that the Company was, on the whole, averse to the acquisition of 'territory' or 'possessions', and their servants in Bengal, unless actuated by some momentous emergency, were unwilling to interfere in native politics or to depart from the position of traders."[134]

It is, however, commonly accepted that Plassey marked the turning point in the British political and military ambitions in Bengal; it was only within eight years that the E.I. Company was granted the *dewāni* of the Province. As to how the East India Company built up its commercial might in Bengal which ultimately led to its usurpation of political power with the strengthening of its position in Hooghly, we have to trace briefly the history of its settlements in Hooghly and elsewhere in Bengal.

"In 1650 the factory at Hughli was founded. The picturesque tradition of Gabriel Boughton and his services in restoring the health of Shah Jahan's favourite daughter, the poor burned Princess Jahanara, and of the reward he so unselfishly claimed in trading privileges for the Company, cannot be wholly trusted; but Mr. Foster's recent researches have made it appear extremely probable that it was due to Boughton's influence with his patron

Sultan Shuja that, in 1651, the Hughli factors obtained a *nishan* from Sultan Shuja, then residing as Subahdar of Bengal at Rajmahal, and by the terms of this *nishan*, for which was paid a *peshkash* of three thousand rupees, the English were permitted to trade free of duty. . . .An account of Hughli written by Walter Clavell in December, 1676 states: 'Hughly having the advantage of situation upon the banks of the river Ganges, whose branches come far from the country above, and spread wide thereabouts, was in former times in possession of the Portuguese, who in their prosperity sailed to it yearly from India to Malaya with 60 to 100 vessels, and since the loss of it to the Moors, which happened about 42 years since, hath continued to be a scale (emporium) of great trade, having the King's mansabdars for governors, who were put in by and answerable to the Nabobs of Bengal, who reside at Rajmahal, or Dacca, as they pleased. So long as it continued thus governed by the Moors, justice was more exactly administered and complaints made against the King's officers took place, particularly in the favour of strangers. But since the year 1663, or thereabouts (really 1666) that Nabob Shaistah Khan, the present King's uncle became Suba, or Viceroy of Bengal, and obtained Hughly as part of his *jagir*, his servants being made so far governors as to receive all the rents, profits, perquisites, fines, customs, etc. of the place, the King's Governors hath little more than the name, and for the most part sit still while the Nabob's Officers oppress the people. . . .And yet, as if this were not enough to impoverish them, the Governor, whenever he hath any goods on his hands, calls for them, and distributes amongst them what quantity he pleaseth, at 10 to 15 per cent higher than the market's for time, and they pay ready money. . . .'

"Despite the oppressions complained of the commercial undertakings of the English prospered, and from Hughli they despatched their merchants up-country. . . .During the struggle between the sons of Shah Jahan, the Faujdar of Hughli and the English had come to an agreement that in return for its privileges of free trade in Bengal the Company should pay an annual peshkash of Rs. 3,000 to the Subahdar. . . .Stewart observes that 'although no English vessels were allowed to sail up the Ganges before his (Shaista Khan's) time, viz, A.D. 1664, yet it appears that, in the year 1669, the East India Company had, by his permission, formed a regular establishment of pilots, for conducting their ships up and down the river. Shaista Khan also, in the year 1672, granted them an order for freedom of trade throughout the province, without the payment of any duties.' In Shaista Khan's time, it is said, the French and the Danes commenced their commercial activities in Bengal."*

* Firminger further quotes Stewart in a footnote: 'It was during the Government of Shaistah Khan, that is to say about the year 1676, that the French and the Danes established themselves in Bengal.' Firminger adds in explanation:

"In the year 1682, the Company, in consideration of the great increase in its Bengal investments, and no doubt elated by the receipt of Aurangzib's farman, made Bengal independent of Madras, and despatched William Hedges, one of their directors, to be their chief Agent or Governor in the Bay of Bengal. . . .Although Bengal had twice been visited by the Company's Governor of Fort St. George, and attempts had been made to remedy evils, yet in 1682 the trade in Hughli came to 'a general stop'. . . .

"In the year 1686 Job Charnock, having given the slip to the guards placed round his house at Cossimbazar to prevent his departure, arrived at Hughli, and assumed the office of Chief at the Bay. Before the close of the year troops from England to the number of nearly three hundred had been landed in Bengal, and quartered in the neighbourhood of Hughli. The squadron sent out consisted of six ships, each with its company of soldiers; but of these ships three only reached the Bay. . . . The Company in India also could supply a number of vessels well adapted for the purpose of river conflict. In addition to the soldiers sent out for the campaign, the Company had already at Hughli a motley band of fighting men—native Christians and half-caste Portuguese, known as 'topasses', Rajputs, and native peons. The Nawab, on the other hand, was easily able to despatch three thousand horse and three hundred foot to guard the town, and the Governor, Abdul-Gani, at once raised a battery of eleven guns to threaten the English shipping in the river. On October the 28th, the ill-treatment of three English soldiers, who had gone as usual into the bazar, where they had been seized and beaten, led to the outbreak of hostilities. The fighting of that day went in favour of the English. . .and it was believed that Abdul-Gani disguised himself and fled panic-stricken. The English factory, however, had been burned and Charnock, who had been intending to abandon Hughli for some time before the actual outbreak, realised that the cessation of hostilities, agreed upon after the conflict of the 28th, was but breathing space in which he had best prepare for a withdrawal. Not till December the 30th did the English leave Hughli,

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"Apparently the French first settled in or close to Hughli. In 1688 Andre Boureau-Deslandes was appointed Director-General of Commerce in Bengal, but, having quarrelled with the Portuguese Augustinian Friars in 1690, he retired to Chandarnagar and commenced a *loge* there. On January 16th, 1692 the Calcutta Council writes that 'the French had almost completed a large factory at Chandarnagar.' The General letter from Fort St. George (Madras), dated 20th November, 1601, records 'the Mounseers have been long idle and quiet at Pullichery. . . though their Chief in Bengal is building several large factoryes, bigg enough for a mighty trade but 'is doubted too large for their stock. . . .' Streynsham Master in September, 1676, writes: 'less than two miles short of Hughly we passed by the Dutch garden, and a little farther by a large spot of ground which the French had laid out for a factory, the gate to which was standing but was now in possession of the Dutch. . . .'The Danes had an entrenched factory at Balasore. . . . The Danish settlement at Serampore was not commenced until 1759." W. K. Firminger, *Historical Introduction to the Bengal portion of the Fifth Report* (Reprint by *Indian Studies: Past and Present*). Calcutta, 1962. p. 71, f.n. 17.

and in their ships sail down the river to Sutanuti, the site of the northern quarter of modern Calcutta. . . .

"In the middle of May Shaista Khan's General, Abdu-s-Samad, had reached the neighbourhood of Hughli and with him were well-nigh twelve thousand men. On May the 28th some seven hundred Mughal horse and two hundred gunners ferried the Rasulpur river, and attacked the English fort. Only after a most desperate fight the English drove off the foe. . . .

"In course of time Charnock received a parwana from Ibrahim Khan (a successor of Shaista Khan—Ed.) and the Imperial Diwan permitting the English 'contentedly' to 'continue their trade in the places of their former residence, at Hughley and Ballasor, etc. under the Government of this subaship' requiring of them the payment of an annual *peshkash* of Rs. 3,000 and forbidding any further demands."[135]

Thus, we see that in order to establish their position as traders the E.I. Company needed some standing in civil and administrative matters. How from this position, they were gradually led to assume the charge of the entire administration of Bengal forms the interesting subject of the next stage of the Company's history in this region. "The necessity of providing some sort of local government, of finding means of defraying the ever-increasing expenses of roads, markets, river landing-places, etc., and many other urgent considerations, compelled the English to obtain at least the recognised authority that the neighbouring zamindars possessed. Until such a jurisdiction could be obtained, they were subject to be harrassed every day of their lives by overbearing and fraudulent collectors of arbitrary market dues, and for the redress of their own personal grievances the Company's servants would have to rely more on the terror they could inspire than the justice they could obtain from a somnolent and supine Hindu cutcherry. The situation was such that the English could not remain content with the status of mere squatters."[136]

"When the head-quarters of the Company in Bengal were fixed at Hughli, in close proximity to the far more imposing buildings of the Dutch, and under the eye of perhaps the most powerful of the faujdars, the English, living a collegiate life within the boundaries of their factory walls, were not much concerned with problems of civil justice and local administration. Their legal position in respect to the Company Government was that of tolerated merchants, and infidels at that. . . .When, however, Charnock established himself and his subordinates at Calcutta, it was at once found that the practical occupancy of a group of towns, including colonies of wealthy Armenians and native and Eurasian Christains, and possessing a much frequented port, involved the English in new responsibilities and obligations."[137] Accordingly, the Calcutta Council "sent Mr.

Walsh to the Durbar of the Subahdar, Prince Azim-ush-Shan (grandson of Aurangzib)."[138] The results of this deputation were recorded in the Consultations of 31st October, 1698 (quoted by Firminger): "It is *agreed* that 1,500 rupees be paid them (the Jimmidars of Decalcutta, Chuttanutti and Govindpore), provided they will relinquish their titles to the same towns, and give it under their hands in writing, that they have made over the same to the Honourable Company."[139] Monmohan Chakrabartti in his book *A Summary of the Changes in the Jurisdictian of Districts in Bengal*, has described the grant of the three villages to the Company thus: "The occupation of the three villages was in the beginning merely permissive. But it was ratified in 1698 by a Sanad of the then Governor of Bengal, Prince Azim-us-shan, and completed by the Company's purchase of the lands from their immediate owners by a sale-deed executed on 9th November 1698 A.D. In this sale-deed the consideration money is put down at Rs. 1,300 (current coin); *Dihi Kalkatah* and *Sutanati* are described as included in the Pargana Amirabad, and *Govindapur* in Parganas Kalkatah and Paikan."[140]

On the accession of Farrukh-Siyar to the throne of Delhi, the Company sent a deputation in 1714 with the mission of getting a confirmation of the grant of the three villages and for a further permission for purchasing 38 more villages. "These lay close to Calcutta, for a distance of about 8 miles on the left bank and of about 3 miles on the right bank of the Hooghly. On account of the opposition, however, of Murshid Quli Khan, the Dewan and Nazim of Bengal, no zamindar dared to sell any of the villages. In course of time, however, the Calcutta Council gained possession indirectly of several villages through their servants and dependants."[141] This was the second stage in the territorial acquisition of the Company in Bengal. The third stage came with the victory at the battle of Plassey. "Shortly before the battle, a secret treaty had been drawn up between Mir Jafar and Colonel Clive, in which Mir Jafar had agreed to the following terms: firstly, that he would grant to the English Company the zamindari right of all lands within the Maratha ditch (dug in 1742 for protecting Calcutta against Maratha raids--Ed.) and of other lands six hundred yards beyond the ditch; and secondly, that he would grant to the Company zamindari of all lands lying south of Calcutta as far as Culpi."[142]

From the very beginning of their acquiring land rights in Bengal, the Company faced the problem of the management of revenue administration. "The Council had before them in 1759 the problem which was to occupy the attention of the English revenue administrators up to the date of Lord Cornwallis' Permanent Settlement. The choice lay between collecting the revenue direct from the representatives of the cultivators or from the zemindars, or letting the collections out to speculative capitalists to farm. In 1759 the English

decided in favour of the second method."[143] The final acquisition of the Twenty-four Parganas also came in 1759. "In the same year, 1759, Prince Mahomed Ali Gohur (afterwards Emperor Shah Alam) with the design of supplanting Mir Jafar in his government, entered Behar, at the head of an army, which at one time was supposed to number 40,000 men. The Prince at once sought to induce Clive to desert Mir Jafar, but, so far from wavering in his alliance, Clive gathered together a force of 500 Europeans and 2,500 sepoys and set out for Patna. Having relieved that citadel, Clive returned to Murshidabad, where the Nawab Mir Jafar, either out of gratitude, or as a means for securing or confirming Clive's fidelity, bestowed upon him the jagir of the lands known as the Twenty-four Parganahs."[144]

As it has already been mentioned in the previous chapter, sizeable portions of the present Hooghly district were initially a part of the zemindari of 24-Parganas. Some more areas of the district came under the control of the British in 1760 when the Nawab Mir Kasim concluded a treaty with the Company in February of that year, by which the districts of Burdwan, Midnapur and Chittagong were ceded to them. Large tracts in the northern part of the Hooghly district were thus made over to the Company, because they were included within the *chāklā* of Burdwan.

"Early in February 1760, Colonel Clive resigned the Governorship of Bengal and was succeeded at first by Mr. J. Holwell, and then in July 1760 by Mr. H. Vansittart. Between Mir Jafar and the Calcutta Council various causes of friction had arisen, mainly on account of the failure to pay the arrears due to the English troops, and the Nawab's refusal to grant Chittagong in farm. On 27th September 1760, the Select Committee concluded a treaty with Mir Kasim at Calcutta, by which they agreed to confer the Niabat on Mir Kasim, while the latter agreed to grant to the Company the districts of Burdwan, Midnapore and Chittagong to meet all the charges incurred by the Company for the maintenance of troops. Governor Vansittart then proceeded to Murshidabad, and on 20th October 1760 deposed Mir Jafar and placed Kasim Ali on the masnad.

"Amongst his first acts, Nawab Kasim Ali issued Sanads granting the Company Pargana Bardwan, Chakla Midnapore, and Thana Islamabad (Chittagong) for the maintenance of European and Native troops to protect the royal dominions. The Sanads are dated 1st Karttik 1176 B.S., or 15th October 1760 A.D."[145]

The management of the newly acquired territories of Burdwan and Midnapur was placed under the Residents in charge of the Company's factories in those places, and in both these areas the new administrators attempted to introduce drastic changes in the system of collection of land tax. "In Bardwan and Midnapore the Residents introduced the farming system, without considering the

claims of previous zamindars and talukdars. The result was disastrous for revenue collections in these chaklas."[146]

L. S. S. O'Malley, citing the evidence of James Grant's Views of the Revenues of Bengal (pp. 474, 479), tells us: "The revenue collections were made by a Superintendent, Mr. Johnstone, who was in charge of Hooghly as well as Burdwan, and then by Supervisors, of whom Mr. Verelst was one in 1765."[147]

In February 1765, a treaty was signed between the Company and Najim-ud-daulah, the son of the late Nawab Mir Jafar, confirming the grant of Burdwan, Midnapur and Chittagong districts to the Company and appointing Muhammad Reza Khan as '*Naib Subāh*' (i.e. in charge of the *subāhdāri* administration), from which office he was not to be dislodged without the sanction of the English Company.[148] In August of the same year another treaty was concluded between the Nawabs of Oudh and Bengal on the one hand and the East India Company on the other, laying down, *inter alia*, that "His Highness (the Nawab of Oudh—Ed.) shall allow the English Company to carry on trade, duty-free, through his dominions."[149]

"By articles of Agreement, dated August 19, 1765, it was arranged that the Nawab of Bengal, Najim-ud-daulah, should pay to the Mughal Emperor the sum of twenty-six lakhs of rupees per annum . . . the first payment to be made on September 1, 1765. As the English Company were to be security for the payment of this sum, the Emperor Shah Alam, on August 12, had already made over to the Company, 'the Dewanee of the provinces of Bengal, Behar and Orissa, from the beginning of the Fussal Rubby of the Bengali Year 1172 as a free gift and ultumgah (altamgha) without the association of any person, and with an exemption from the payment of the customs of the Dewanee, which used to be paid to the court.' . . . "

It appears that Clive had set great store on the acquisition of the *dewāni* as a means to end corruption and malpractices in the administration and the resultant harm to the interests of the Company. "By this acquisition of the Dewanny," wrote Clive in a General Letter to the Court of Directors on 30 September 1765, "Your possessions and influence are rendered paramount and secure, since no future Nabob will either have the power or riches sufficient to attempt your overthrow by means either of force or corruption. All revolutions must henceforward be at an end as there will be no fund for secret services, for donations, or for restitutions. The Nabob cannot answer the expectations of the venal and the mercenary, nor will the Company comply with demands, injurious to themselves, out of their own revenues. The experience of years has convinced us that a division of power is impossible without generating discontent, and hazarding the whole; all must belong either to the Company or the Nabob."[150]

Firminger, however, makes out with the aid of documentary evidence that the transfer of the revenue administration from the Nawab to the Company 'was no original idea of Lord Clive.'[151] It had in fact been pressed upon the English by 'the Mughal' in 1758, and again in 1761 and 1763.[152] When the Court of Directors ultimately gave its sanction to the acceptance of the *dewāni* (letter of 17 May 1766), it thought that the Company's activities should be confined only to the collection and disbursement of the revenues of the land without upsetting the existing indigenous machinery of government or interfering too much with the other branches of administration vested in the Nawab—a view shared and sought to be implemented by Harry Verelst when he assumed charge. Clive, however, had realized that the Nawab's authority had by this time been reduced to a 'name and a shadow' and that the Company should, sooner or later, by 'throwing off the mask' assume overall sovereignty in Bengal.[153]

The net effect of these changes on the history of the Hooghly district was that those portions of it which had not passed into the hands of the English with the acquisition of the zemindari of 24-Parganas or along with the ceded district of Burdwan, now came under the Company in respect of revenue administration together with the rest of the *subāh* of Bengal. In a list of the districts that made up the *dewāni* portion, enumerated by James Grant in his *Analysis of the Finances of Bengal*, the name of 'Mahomedameenpore' figures at the 17th place. In a footnote, Firminger points out: "It must be observed that No. 17 Mahomedameenpore, as described by Grant, is a partition of the old sarkars of Satgaon and Salimabad."[154]

Under the new arrangement, a Controlling Council was appointed at Murshidabad "for the administration of the affairs of the Nawab"[155] . . . and Muhammad Reza Khan was appointed to the "office of Diwan to the Company."[156]

With the departure of Lord Clive for England on 26 January 1767, Harry Verelst succeeded him to the Presidency and Governorship of Bengal.[157] During the latter's administration, a plan was formulated by the Select Committee on 16 August 1769 to place 'Supravisors' or a category of European officers in charge of each district for making "minute local investigations and to gather as much information regarding the revenue as possible."[158] In August 1771, the Court of Directors wrote to the Company's servants in Calcutta instructing them to publicly stand forth as dewan. This order meant that not only was the Company being instructed to openly assume charge of the management of revenues, but that the office of the Naib Dewan, held by Muhammad Reza Khan, was being terminated as well. In April of the following year (1772), Warren Hastings assumed the office of Governor. Acting on the orders of the Court of Directors, the Governor in Council in Bengal

made certain changes in the system of revenue administration. The 'Supravisors' were henceforth to be called 'Collectors' and assisted in each district by an Indian with the title of Dewan. It was also decided to let out the lands for a period of five years to revenue farmers. A Committee of Circuit was set up, consisting of the Governor and four members of the Council, for visiting the principal districts and finalizing the five years' settlements.[159] Between October 1772 and March 1773, such settlements were taken up in the districts of Hooghly, Midnapur, Birbhum, Jessore and Calcutta.[160] Regarding the settlement of lands at Hooghly, Firminger comments: "At Hughli the determination of the Council to let the lands in small farms, was modified by offers for large lots, which proved too tempting to be resisted, while, at the same time, the pleas of a number of talukdars and petty zamindars were accepted, and lands granted to them on terms similar to those accorded to their compeers by the Committee of the Revenue at Krishnagar."[161] This was in keeping with the two leading ideas of the Committee in settling lands, which, according to Firminger, were (*a*) that letting out of the lands to revenue-farmers "making voluntary offers was an eligible method of discovering the real value of the lands," and (*b*) that "a settlement with the established zamindars and talukdars on conditions similar to those required from the farmers was preferable to letting the lands to other persons."[162]

To sum up, the changes that took place in 1772-73 in the administration of the Hooghly region were as follows: (1) Hooghly formed a separate and distinct collectorship with the salt tracts of Tamluk, Mahisadal and Hijli. (The salt tracts were separated and incorporated within the 'Hazur Taluk' by an order of 16 March 1773) [163] and (2) with the formation, in November 1773, of five Provincial Committees of Revenue, each in charge of a 'Grand Division', Hooghly figured as a district-collectorship under the first Grand Division administered from Calcutta and the aforesaid salt tracts came under Midnapur, which, although still under the Calcutta Committee, was placed under Burdwan.

This system of revenue administration continued for more than seven years. Certain changes, however, took place in February 1781, when the Governor-General in Council directed that the Provincial Councils should be abolished and that only a single Committee of Revenue consisting of four covenanted servants of the Company should be in charge of the entire administration of revenue.[164] Owing to a gradual increase in the number of Collectors on account of heavy pressure of work under the new system, the Governor-General in Council in the Secret Department of Inspection Proceedings of 1784 and 1785 decided that "the Collectorship of Fattehsing and Hooghly appear to the Board to be totally unnecessary as the vicinity of these districts suggests the propriety of placing them

immediately under the superintendence of the Committee. . . . Resolved, therefore, on the immediate abolition of these offices, . . ."[165] When these resolutions were carried out, the Collectorship of Hooghly was abolished and the area placed under the charge of the Calcutta Division. In April 1786, the Committee of Revenue drew up a resolution that the Divisions of Calcutta and Murshidabad were to be subdivided into eleven Collectorships—Murshidabad, Rajshahi, Nadia, Fatteh Singh, Mahomedshahi, Silberris, Lashkarpur, Jessore, Hooghly, 24-Parganas, and Calcutta Town.[166] This resolution was carried out with the approval of the Governor-General in Council.

Such frequent changes in the machinery of administration and the territorial jurisdictions of the units were accompanied by a lot of confusion and unnecessary expense and were being looked upon with growing disfavour by the Court of Directors at London. Thus, even when the changes suggested in April 1786 were being implemented, a General Letter from the Court of Directors to the Governor-General (21 September 1785) reached Calcutta expressing disapproval of the 'frequent variations of system' and giving certain directions for the adoption of a settled plan. In accordance with these orders, the Committee of Revenue was abolished and a new body with the name of 'Board of Revenue' came into existence. "This Committee, the parent of the modern Board of Revenue, held its first meeting on the 7th June 1786."[167]

The Court of Directors followed up with another General Letter (dated 12 April 1786 and received in Calcutta early in 1787) giving specific instructions about the manner in which a more settled plan of administration was to be established. "In accordance with the instructions received, the new Governor-General (Lord Cornwallis) in his letter dated 5th February, 1787, desired the Board of Revenue to prepare, without loss of time, a plan for the arrangement of the country into collectorships in such a manner as would be best adopted to the despatch of business and the mutual convenience of Government and the inhabitants. In the formation of the plan the Board was to attend to the following three rules: *firstly*, that each zamindari should remain undivided under one authority; *secondly*, that in the disposition of the several parganas into collectorships their contiguity should be considered; and *thirdly*, that no collectorship should have a revenue below five lakhs, unless it were a frontier district or had other peculiar circumstances which should be stated. In this way the Governor-General hoped that the number of fixed collectorship at one time should not exceed the number of twenty or twenty-five."[168] In fact, John Shore, the then President of the Board of Revenue, in his plan submitted in March 1787 reduced the 36 different establishments for collection of revenue to twenty-four. According to his plan the Collectorships of Lashkarpur, Silberris and Hooghly, which had revenues of less than five lakhs each were incorporated

in adjoining collectorships, the greater part of the Hooghly Collectorship being annexed to the district of Nadia.[169] When the Decennial Settlement was stabilized and made permanent by the Regulations of 1793 (known as the Permanent Settlement), fifteen Collectorships came into being in Bengal.*

The evolution of the administration of justice, both civil and criminal, between 1772 and 1793, also forms an important phase of early British rule in Bengal. This subject has been dealt with in the chapter on Law, Order and Justice.

The district of Hooghly was formed by Regulation XXXVI of 1795 which indicates that all changes in the jurisdictions or administrative set-up of the districts had not been settled with the implementation of the Regulations of 1793. As Monmohan Chakrabartti has pointed out: "With the reforms initiated by the Regulations of 1793, the transition from the Musalman system of Government to one more in consonance with British principles was completed. But these reforms were only valued to numerous changes deemed necessary by varying needs and circumstances of the body politic. Among these changes, changes in jurisdiction, revenue, criminal and civil, were not the least important.

"The jurisdiction changes from 1793 to 1916† may, for facility of treatment, be broadly divided into two periods: (*a*) the period under the East India Company, 1793-1858; (*b*) the period under the Crown, 1858-1916.

"The main characteristics of the former period may be summed up in one word, development. Changes in general systems still continued to be made. For example, the Magisterial powers which had been attached to the Judge, were for some time placed in the hands of an entirely separate officer, the Magistrate, and were finally transferred to the Collector."[170]

According to the same author, the factors causing changes in the administrative set-up were many, namely dacoities, armed burglaries and raids by tribes,‡ pressure of work of the district officers, petitions by landlords and inhabitants of particular areas, territorial acquisitions and topographical changes. So far as the district of Hooghly was concerned, heavy pressure of work of the district officers was responsible, in the first place, for the separation of Hooghly from Burdwan in 1795 and of Howrah from Hooghly in 1843. Territorial acquisitions, implemented by two important treaties, accounted for the incorporation into the district of the Dutch settlement at Chinsura and Danish settlement at Serampore in 1824 and 1845 respectively.

* As to how the district of Hooghly again came into being two years later, in 1795, and the subsequent changes that took place in its jurisdiction have already been traced in the previous chapter.

† The year in which the author ended his study.

‡ In Hooghly, dacoities were a specially noticeable feature. For further details, see chapter on Law, Order and Justice.

Chandernagore, which had been restored to the French in 1763, however, continued to be a French settlement till even after Independence.*

The subject of the transfer of Chinsura and Serampore brings us to the question of the history of these two important European settlements in Bengal. A brief outline of the history of the Dutch at Chinsura and the Danes at Serampore has been traced in Chapter XVI on Places of Interest under those two townships. We may, therefore, confine ourselves here with the bare facts of the political events connected with these two settlements. George Toynbee, in his *A Sketch of the Administration of the Hooghly district from 1795 to 1945* has given the following brief account:

"The Dutch established themselves at Chinsurah in the 17th century, the first sannad granted them by the Emperor Shah Jehan being dated 1638. . . . The English took possession of Chinsurah on the 28th July 1795. It was restored to the Dutch on the 20th September 1817, its affairs being administered during the interval by a special Commissioner, Mr. R. Birch. During this interval the Dutch paid a yearly rental of sicca Rs. 847 for the lands left in their possession. . . . . Reference is also made to the existence of a Dutch fort at Chinsurah and to a road called 'Van Hoorn's Dyke'. The former has entirely disappeared, but the remains of the latter are still to be seen between Chinsurah and Chandernagore railway stations. . . . Our Dutch neighbours appear to have been peaceably inclined, and to have devoted all their energies to commerce and trade; not even looking to the land as a chief source of revenue, but yet not hesitating to impose *abwabs* and taxes of all kinds.

"By the Treaty dated London, 17th March 1824, Chinsurah was finally ceded to England, along with the other Dutch factories of Calcapore, Dacca, Patna, Fulta and Balasore, with effect from the 1st March 1825. Chinsurah was not, however, actually made over to us until the 7th May of that year."[171]

As for the rise and fall of the Danes at Serampore, Toynbee gives us an adequate account which needs to be quoted at some length:

"The Danes originally established their trade in Bengal in the year 1698, and paid Rs. 30,000 in ten annual instalments for their *firman*, which was granted them by the Prince Azim-ud-din, the grandson of the Emperor Aurungzebe. In 1753 we find Mr. Soctman, the Chief of the Danish establishment, residing at Chandernagore, where the vessels consigned to him unloaded their cargoes. The return cargo was shipped from that town as the property of the Governor, Mr. de Leyrit, though not without many disputes with the

* The history of Anglo-French rivalry in the 18th century has been treated in Chapter I as also earlier in the present chapter. As for a general history of the French settlement at Chandernagore, see Chapter XVI on Places of Interest under Chandernagore.

Nabob's custom-house officers, who doubtless had some suspicions of the ownership of the goods. The Danish factors therefore felt the necessity of obtaining a settlement which they might call their own in Bengal, and they opened a negotiation with the Nabob through the well-known Monsr. Law, the French Agent at Cossimbazar, who enjoyed pre-eminent influence at the Moorshedabad durbar. . . . There were no public posts in Bengal at that time, and M. Law's letter of the 30th July, announcing that he had succeeded in obtaining a perwanna for the erection of a factory at Serampore, was twelve days in reaching Chandernagore.

"M. Law himself arrived with that document on the 6th of September, together with an order on the Fouzdar of Hooghly to deliver possession, but a month elapsed before the arrangements with this important personage could be completed. . . . They were entitled by the viceregal *firman* to the occupation of sixty beeghas of ground. They preferred taking three beeghas in Serampore and fifty-seven in Ackna, because 'no ship could lay at Ackna, though a good factory might be built there on a large open spot of ground.' They discovered that if they took the whole quantity in Serampore they would have been obliged to purchase all the houses which stood on it, of the value of 10 or 12,000 rupees. This shows that the village was of some mark even before a European settlement was established in it. Soctman therefore contented himself with the river frontage and the secure anchorage before it. On the 8th of October, 1755 the Danish flag was hoisted at Serampore and four peons were appointed to guard it. The expenses incurred at the Durbar in obtaining the *firman*, in presents to the three Nabobs, and in the purchase of the ground from the proprietors, had amounted to a lakh and sixty thousand rupees, £16,000. The factory, however, advanced slowly. . . . On the 15th of December Ziegenbalk, the second in command, remeasured the ground, and it was resolved to surround the factory with a mud fence and a straw roof to protect it during the rains. . . . It was just at this juncture that the young Nabob Seraj-ud-dowlah passed down with 50,000 men on the opposite bank, breathing vengeance on the English for having fortified Calcutta and given protection to Kissendas. He sent across the water to order Soctman to join the army with all his troops, cavalry, infantry, and artillery; to which the Governor replied that he had neither horse, foot, nor guns, but was living in a miserable mud hut with only two or three servants.

"The settlement grew and flourished under the predominance of European influence in Bengal, and participated in that security for property which the establishment of the English Government had introduced. It was also greatly assisted by the capital of the servants of the English East India Company. They had formerly been permitted to remit their fortunes to England by bills from the local authorities

on the Court of Directors; but this permission was found to afford such great facilities to the Government of Bengal for borrowing money, the payment of which the Court was expected to provide for at home, that it was very wisely withdrawn. The British officers were therefore constrained to make their remittances through the foreign factories, and this accession of capital gave a new impulse to their commercial enterprises. At the close of the American War, England was involved in hostilities with the three maritime nations of North America, France, and Holland, and English vessels were exposed to the attacks of privateers, and English trade subjected to very heavy insurances. These were the golden days of Serampore commerce. Before the close of that war no fewer than twenty-two ships, mostly of three masts, and amounting in the aggregate to more than ten thousand tons, cleared out from the port in the short space of nine months. This trade, though eminently profitable to the Danish East India Company, was perhaps still more advantageous to their factors, who, while in the receipt of salaries not exceeding two hundred rupees a month, drank champagne at 80 rupees a dozen, and in a few years returned to Denmark with large fortunes. The late John Palmer of Calcutta, usually styled the Prince of Merchants, was the Agent of the Danish Company, and has repeatedly assured us that he has sat day after day in the godowns at Serampore counting and weighing out goods, and that he seldom realized less than a lakh of rupees a year.

"The first interruption which the trade of Serampore received after a course of uninterrupted prosperity for forty-five years was in the year 1801, when, in consequence of hostilities between England and Denmark, it was sequestered by the English authorities. But it was restored almost immediately after, at the peace of Amiens, and the loss was rapidly repaired For five years after it throve beyond all former example. As the Bay swarmed with French privateers and insurances had risen almost to a prohibitory rate, the merchants of Calcutta eagerly availed themselves of the neutral flag of Denmark, and obtained Danish papers and a Danish commander for their vessels as a protection against the privateers which infested the Sand-Heads. English vessels fell into the hands of the French by the dozen, and were carried to Isle of France and confiscated. It was currently reported, and never contradicted, that some of the Calcutta merchants despatched vessels under Danish colours to that island, and purchased their own cargoes at a reduced rate, and brought them back to be sold in Calcutta. In 1808 the sun of Danish prosperity set for ever in Bengal, after it had shone for a little more than half a century. England robbed Denmark of her fleet at Copenhagen, and a detachment of British troops crossed over from Barrackpore and took possession of the town and of the well-filled store-houses of Serampore. . . . From the blow thus inflicted, the

Danish East India Company never recovered. Serampore was restored after the pacification of Europe in 1815, but the Company was on the verge of bankruptcy. The traffic in country piece-goods, which had been the staple of Danish commerce, had begun to yield to the rivalry of English manufactures, and in a short time after the restoration of the town the products of English power-looms completely extinguished the trade in Indian goods. Since 1815 one vessel, and one vessel alone, has visited the port. For the last thirty years the settlement has been maintained only draining the home treasury. The King of Denmark has at length yielded to the wishes of his people and disposed of possessions which entailed a heavy expense; and Serampore and Tranquebar were at the beginning of the last year transferred to the British Government for the sum of twelve lakhs of rupees, £1,20,000; and on the 11th of October 1845, just ninety years and three days after Soctman had first hoisted the Danish flag in this town, it was taken down and English colours hoisted in its stead."[178]

The highlights of the history of the Hooghly district during the 19th century consisted of a great resurgence of learning, an impressive spread of educational and cultural activities initiated both by foreign missionaries and eminent local persons, the emergence of new religious ideas and movements and the great strides made in the field of social reforms. Each of these aspects of the social and cultural life of the people of Hooghly deserves special treatment, which they have received in different chapters of the present volume.*

Freedom struggle

We may continue our narrative here with the subject of the impact of British rule on the local people. The first stirrings of discontent against foreign rule in Hooghly, as in many other places in Bengal, came from the cultivating masses in the form of agitation against indigo planters. The cultivation of indigo was first introduced in the district towards the end of the 18th century, but it was in 1795 (Regulation XXIII) that the Government sought to organize the industry by trying to determine relations between the indigo planters and the cultivators. This was followed by Regulation VI of 1823 and Regulation X of 1836. The cultivation of indigo was extensive in the district as were the excesses of the planters. During this time non-official Europeans were mainly engaged in the manufacture of indigo, sugar and rum. Indigo appears to have been introduced into the district as early as 1779 and "the industry must have been well established by 1793. . . .Towards the end of that century the cultivation of indigo gradually increased and a number of factories were started in the mofussil. . . .During 1822-42, indigo factories were in

* See, for instance, the chapters on Education and Culture, Places of Interest, Public Life and Social Service Organizations as also the appendices at the end of the volume entitled 'Eminent Sons of Hooghly' and 'Christian Missionaries of Hooghly' contributed by well-known scholars.

existence at Chanditala, Bansberia, Hosnabad, Talda, Durgapur, Kalkapur, Melia, Paigachhi and Khanyan. . . .The natives were hostile to the industry and assaults and riots were not infrequent."[173] A few uprisings against the planters occurred at Chanditala and other places in 1810, 1828 and 1835.[174] The scene of *Nildarpan*, a stirring Bengali drama by Dinabandhu Mitra based on the miserable plight of the indigo cultivators, is supposed to have been based in an indigo factory at Bansberia.

It seems that the district of Hooghly was not significantly involved in the general turmoil of the Rebellion of 1857, or during the Indigo Revolt of 1859-1861. But gradual increase of political consciousness, this time among educated middle classes, was noticeable towards the close of 19th century, when some developments of far-reaching significance like the foundation of the Indian National Congress and the granting of small modicums of local self-government in 1864, 1872 and 1885, fired the imagination of the people. The policy of liberalization and repression pursued alternately by the authorities led to political discontent which reached its climax with the partition of Bengal in 1905.

The events connected with the first signs of national awakening at the end of the 19th century, the *Swadeshi* movement in the first decade of the present century, and the development of a genuinely revolutionary movement within the district have been dealt with elsewhere in this volume.* In order to avoid repetition, we may continue here with such aspects of the national liberation movement as are related directly and specifically to events within the district and have not been treated elsewhere in this volume.

During the first decade of the 20th century, the widespread agitation in Bengal in the wake of the partition of the province did not leave the district untouched.[175] The torch-bearers of patriotism so eloquently preached in the 19th century by such eminent intellectuals and writers as Bankimchandra, Bhudevchandra, Hemchandra, Nabinchandra and Jogendra Vidyabhusan, organized themselves in 1903 into a revolutionary band known as the 'Hooghly Group' under the inspiring leadership and guidance of Satish Mukherjee and Brahmabandhab Upadhyaya.[176] Simultaneously, a secret society was formed at Hooghly with the object of linking up the movement within the district with that launched by Aurobindo Ghosh in Bengal and Maharashtra.[177] In Chinsura, a students' organization was established which, during the height of the anti-partition agitation in 1905, started a night school for labourers and established a 'National High Court'. Both this organization and the night school survived for a

* See entries 'Aurobindo Ghosh' and 'Brahmabandhab Upadhyaya' in the Appendix 'Eminent Sons of Hooghly'. Also, Chapter XVI on Places of Interest, under Chandernagore, Pandua, Haripal and Tarakeswar as well as Chapter XV on Public Life and Social Service Organizations.

number of years.[178] The activities of other such organizations in the district were mainly confined to imparting physical and quasi-military training to young men of the respective localities but in later years, i.e. at the close of the first decade of this century and also during the second, sporadic attempts at plotting and executing revolutionary and terrorist programmes were made.[179] The district was also involved in the twin movements of *Swadeshi* and the boycott of foreign goods for which a group was formed at Baidyabati in 1903.[180]

After the First World War, political ideologies, so far influenced by secret societies and their vision of a violent overthrow of the Government, took a different turn.* A general disillusionment had set in with the refusal on the part of the authorities to recognize the demand for self-government. Revolutionary and terrorist leaders, freed from jail, were undecided about their future course of action. The Rowlatt Bill and the massacre of Jalianwallabagh plunged the whole nation into a feeling of great bitterness. It was at this juncture that Mahatma Gandhi appeared on the Indian scene and his proposal of non-cooperation with the authorities till the attainment of full independence was mooted in a special session of the Indian National Congress in Calcutta in September 1920 under the presidentship of Lala Lajpat Rai, and was later (26 December 1920) carried at the Nagpur Congress. The programme of the new movement included the boycott of British courts and educational institutions by lawyers, teachers and students; a nationwide re-construction drive through the media of *charkā* and *khādi* and 'national' educational institutions; the boycott of intoxicants and fostering of communal harmony. Very soon this new tide of national resurgence began to course through the district of Hooghly.

In 1921, responding to the call of Gandhiji, many young men gave up their studies to devote themselves to the non-cooperation movement and were joined by lawyers and others who left their professions at Hooghly, Serampore and other places. The Hooghly Vidyamandir and the Hooghly District Congress Committee were established in Hooghly town (Katgarah Lane) and large public meetings were held all over the district to spread the new ideology and to collect funds for the 'Tilak Swaraj Fund'. Local branches of the Congress were established at numerous places. The teachers also joined in and started a 'national' school. In May and June 1921 the movement spread to Arambagh and aroused a keen response.

After the 'Chaurichaura incident' Gandhiji called off the movement in February 1922 and Congress workers devoted themselves to social re-construction and propagation of the gospel of *khādi*.

* The following account of the freedom struggle in the district follows an article by Ratanmani Chattopadhyay in *Smaranee*, a publicity brochure brought out by the District Congress Committee in 1961.

An important event of the year was the starting of the Sakti Press at Calcutta by a band of leading political workers of Hooghly and this institution has ever since been closely associated with the Congress movement in the district. The following year, 1923, witnessed the extension of the *charkā* and *khādi* programme (in which the Hooghly Vidyamandir played an important role) and of relief operations in the interior areas.

In 1924 Congress activities in the district took an interesting turn when an agitation was launched to end long-standing evils associated with the management of the famous Sivaite centre at Tarakeswar. Deshabandhu Chittaranjan Das took a leading part in it and some of the foremost Congress leaders of Serampore and other places joined the *satyāgraha* movement. As a result, the *mohānta* (chief priest) was replaced by a 'Receiver' to supervise the temple properties. In 1925 Mahatma Gandhi visited the Hooghly Vidyamandir and the *khādi* centre at Serampore. In 1928 there were numerous processions and meetings throughout the district advocating the boycott of the Simon Commission. Next year a big political conference was organized at Hooghly, which was presided over by Deshapriya Jatindra Mohan Sengupta.

In February 1930, when Gandhiji gave a call for a civil disobedience movement and violation of the salt law, the district responded in a befitting manner. Nineteen volunteers started on foot for Contai (in Midnapur district and not far from the Bay of Bengal) to prepare salt from sea-water and thus defy the salt law. There were also token sales of 'forbidden' salt all over the district while picketing of shops selling foreign goods and intoxicants and hoisting of the national flag on top of Government buildings continued unabated in the face of stern police measures. Simultaneously, a 'no tax' campaign withholding payment of dues to many Union Boards in Arambagh subdivision was started and soon assumed large proportions. The authorities came down heavily on the agitators and cast most of the leaders into prison.

Although the intensity of the civil disobedience movement was abated to some extent with the signing of the 'Gandhi-Irwin Pact', a new development within the district kept the political scene tense. An agitation, again in Arambagh subdivision, was launched against the unjust exactions made in course of the Settlement operations which were being carried on there at the time. A significant feature of the movement was the increasing participation of women in it. The agitation was so widespread and the persecution of political workers and even of the general populace so brutal that large masses of people in the 'suspect' villages had to leave their hearths and homes. About 1,500 active workers were thrown into prison. Between 1930-31 and 1933-34, many Congressmen, especially from the Serampore area, came and joined the Arambagh movement. Social welfare work

also progressed during this period and the services rendered at the time of the extensive floods of the Damodar in 1935 deserve special mention. In 1935 Congress candidates from the district were returned with huge majorities to the Bengal Legislative Assembly and in 1937-38 to the different Union Boards and municipalities.

After the outbreak of the Second World War, a campaign was started in the district against all war efforts culminating in the 'Quit India' movement of 1942. The Government took into custody all active sponsors of the movement and closed down the Sakti Press at Calcutta. But the struggle continued till the end of the War. On the eve of Independence, a resolution was carried at the *Jātiya Banga Sammelan* (Bengal National Conference) held at Serampore proposing that a new State of West Bengal be formed as an integral part of the Union of India.

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CHAPTER III

PEOPLE

POPULATION

Total population of the district

In the Census of March 1961, a total of 22,31,418 persons were enumerated as living in the district of Hooghly which covered an area of 3,149.44 sq. km. (1,216 sq. miles) according to the Surveyor General of India.* The male and female populations of the district numbered 11,79,267 and 10,52,151 respectively giving a male-female ratio of 53 : 47 per 100 persons. The density of population was 1,840 persons (approximately) per square mile.

The Superintendent of Census Operations, West Bengal and Sikkim has forecast sizeable increase in the district's population in the near future based on certain constant and variable factors relating to fertility, mortality and migration.[1] The maximum and minimum 'projected' population figures thus arrived at and valid for 1966 and 1971 are given in the following table.

HOOGHLY DISTRICT : 'PROJECTED' POPULATION IN 1966 AND 1971

	Maximum (in thousands)			Minimum (in thousands)		
Year	Persons	Males	Females	Persons	Males	Females
1966	2,742	1,447	1,295	2,686	1,415	1,271
1971	3,109	1,630	1,479	3,020	1,581	1,439

Population of subdivisions

During the 1961 Census, 6,62,043 persons were found to be living in the Sadar (Hooghly) subdivision which covered an area of 1,155.40 sq. km. (446.1 sq. miles). Of them 3,47,353 persons were males and 3,14,690 females. The Chandernagore subdivision, with an area of 501.17 sq. km. (193.5 sq. miles), had a population of 4,88,049 (the lowest for a subdivision in the district), of whom males numbered 2,62,568 and females 2,25,481. The Serampore subdivision, with a jurisdiction of 414.40 sq. km. (160 sq. miles), had a total of 5,73,311 persons, 3,14,247 of whom were males and 2,59,064 females. The Arambagh subdivision had a population of 5,08,015 persons inhabiting an area of 1,068.38 sq. km. (412.5 sq. miles), 2,55,099 of whom were males and 2,52,916 females.

Population of police stations

During the Census operation of 1961, there were in all 19 thanas in the district; Dadpur P.S. (in the Sadar subdivision), the latest addition to the list, was carved out of the Polba police station area in 1965. Exact population figures for this new P.S. are not available but for our present purpose we may take the population of the Polba police station as including that of the Dadpur P.S. as well. Serampore thana, covering an area of 58.02 sq. km. (22.4 sq. miles),

* According to the Director of Land Records & Surveys, West Bengal, the area of the district is 3,139.08 sq. km. (1,212 sq. miles). The anomaly cannot be readily reconciled and may be attributed to the difference in surveying methods.

in the same subdivision, contains the largest population of all police stations in the district with 1,97,343 persons. Khanakul police station in Arambagh subdivision with 1,76,853 persons living within its bounds is the second most populous thana in the district. It is interesting to note in this connexion that Khanakul P.S. is over five times the size of Serampore police station with an area of 293.71 sq. km. (113.4 sq. miles). Pursura thana in Arambagh subdivision has the lowest concentration of population in the district with only 73,885 persons inhabiting an area of 100.49 sq. km. (38.8 sq. miles). Magra police station in the Sadar subdivision covering 64.75 sq. km. (25 sq. miles) has also a low population concentration with 82,479 persons. In point of size, Goghat police station in Arambagh subdivision, extending over 376.33 sq. km. (145.3 sq. miles) but containing only 1,24,512 persons, is the largest and Uttarpara police station in Serampore subdivision, having an area of 29.01 sq. km. (11.2 sq. miles) only but containing as many as 1,12,138 persons, is the smallest police station of the district.

The following table presents complete population statistics of the district obtaining in 1901, 1931 and 1961 along with percentage variations in between the years of enumeration.

SUBDIVISION AND THANAWISE DISTRIBUTION OF POPULATION IN 1901, 1931 & 1961 AND PERCENTAGE VARIATIONS

District/Sub-Division/Police Station	Population 1901	Population 1931	Population 1961	% variation 1901-31	% variation 1931-61
HOOGHLY DISTRICT	1,075,872	1,141,517	2,231,418	+6.1	+95.4
Sadar (Hooghly)					
Subdivision	308,474	324,825	662,043	+5.3	+103.8
Chinsura	42,818	40,832	107,697	−4.6	+163.8
Polba	43,462	66,150	114,230	+52.2	+72.7
Dhaniakhali	95,594	73,886	137,505	−22.7	+86.1
Pandua	68,656	68,694	123,345	+0.1	+80
Balagarh	44,414	46,362	96,787	+4.4	+108.8
Magra	13,530	28,901	82,479	+113.6	+185.4
Chandernagore					
Subdivision	204,408	252,353	488,049	+23.4	+48.2
Chandernagore	26,831	27,262	67,105	+1.6	+146.2
Bhadreswar	15,150	57,345	95,769	+278.5	+67.0
Singur	65,517	67,547	128,574	+3.1	+9.3
Haripal	55,121	58,429	111,823	+6.0	+91.4
Tarakeswar	41,789	41,770	84,778	−0.1	+102.9
Serampore					
Subdivision	235,601	276,243	573,311	+17.2	+107.5
Serampore	71,425	67,804	197,345	−5.3	+43.6
Uttarpara	7,036	53,960	112,138	+666.9	+107.8
Chanditala	99,446	101,590	166,884	+2.2	+64.3
Jangipara	57,694	52,889	96,944	−8.3	+83.3
Arambagh					
Subdivision	327,389	288,096	508,015	−12	+76.3
Goghat	106,788	78,380	124,512	−26.6	+58.9
Arambagh	77,961	70,069	132,765	−10.1	+89.6
Khanakul	99,254	98,482	176,853	−0.8	+79.6
Pursura	43,386	41,165	73,885	−5.1	+79.5

Growth of population between 1901 and 1961

The Deputy Superintendent of Census Operations, West Bengal, has made certain highly interesting observations regarding the growth of population of the district over the 60-year period between 1901 and 1961 which are quoted below *in extenso.*[1]

"Ten years back (i.e. in 1951) the district was inhabited by 1,604,229 number of (*sic.*) people. During these last ten years, therefore, the population of the district have *(sic.)* increased by... 39.10 per cent over its population of 1951, the highest rate of growth observed in the district in any one of the past census decades. The rural population of the district have increased by 36.61 per cent during the last decade while the urban population have gone up by 46.71 per cent.

"In the State of West Bengal as a whole, the population have increased by 32.80 per cent during the decade of 1951-61. The rural population have gone up by only 31.81 per cent in the State while the urban population have shown an increase of 35.97 per cent during the last decade.

"Compared to the growth rate of the State, the district of Hooghly had shown a lesser growth rate in the earlier decades. In the Census decades 1901-11 and 1921-31, the district grew at a lesser rate. During 1911-21, the State suffered from a depletion by 2.91 per cent while Hooghly's loss was not as much as that. Its decrease was only to the extent of 0.88 per cent. Since 1921 the district has been steadily growing and its growth rate of population has always been higher than that of the entire State. The same phenomenon is observed in the case of the rural population also. Rural Bengal suffered a loss during 1911-21 by only 4.43 per cent. Rural Hooghly also encountered a loss by almost an equal extent during the great epidemic decade of 1911-21. The growth of urban Hooghly in comparison to that of urban Bengal presents quite a different picture. The urban population of Hooghly grew always at a lesser rate since the beginning of the present century than the urban population of the State, except, of course, in the census decades of 1911-21 and 1951-61. During the influenza epidemic decade of 1911-21, while the population living in towns of West Bengal increased by only 7.16 per cent in spite of an over-all (*sic.*) loss of population in the State, those living in towns of the Hooghly district increased quite appreciably by 15.83 per cent. During the last decade also the urbanisation of Hooghly has been higher than the State as a whole.

"During the first twenty years of the present century, an increase of population by only 2.76 per cent was registered in the district of Hooghly against the State's growth of 3.15 per cent. Profuse urban growth being itself of the extent of 27.40 per cent was mainly responsible for an overall growth of population by even 2.76 per cent in the district of Hooghly, as the rural population during this twenty years period of 1901-21 suffered a depletion by 1.67 per cent.

"During the next forty years, i.e. 1921-61, while the population of

West Bengal increased by nearly cent per cent, the population growth of Hooghly was more than that, the growth being 101.84 per cent over the population of 1921. The rural population had not grown so fast as their urban counterpart. The rural population during this period increased only by 83.41 per cent, while in the urban area the growth had been as much as 182.90 per cent.

"Since the turning of the present century, i.e. during the last sixty years period of 1901-61, the State of West Bengal registered an increase of its population by 106.00 per cent. The district of Hooghly during this period showed an increase of 107.41 per cent over its population of 1901. In the rural sector the growth was less pronounced, it being only to the extent of 80.53 per cent. But urbanisation in Hooghly during these sixty years had been phenomenal, as is evident from the growth of population in the urban sector which had been to the extent of 260.42 per cent.

"In 1872 when the first Census was taken the population of the district, except the French territory of Chandernagore, was returned at 1,119,631. ...Up till the middle of the 19th century the settlement along the river Hooghly—Bandel, Chinsura, Chandernagore and Serampore was considered more healthy than Calcutta. Bandel especially was a health resort. But the 'Burdwan Fever'... attacked Hooghly district like other parts of the Burdwan Division in 1857 and raged for 20 years. ...The mortality was enormous, being estimated by various observers at from one-third of the population up to nine-tenths in certain very severely affected places. Between 1860 and 1868 Bansberia, Pandua, Dwarbasini, Dhaniakhali towards the north; Shah Bazar, Paraumba, Dhipe, Dwarhatta and Kristonagar with other villages on the Kana Damodar; Ajodhya, Sonatikri, Balia, Bandipur with other villages on the Kana Nadi were so severely attacked that by estimate at least one-third of their populations perished in one year.

"The Census of 1881 showed a decrease of 13 per cent in the population of the Hooghly district. The Census Superintendent of 1881 estimated the loss of population at no less than 650,000 due to the fever and, apart from actual mortality, the fever reduced the vitality of the survivors thus diminishing the birth rates and also forcing a number of inhabitants to leave the district for healthier areas.

"The disappearance of the fever was followed by a recovery, the result being palpably observed in the increase of 6 per cent of population in the district during the next decade, that is 1881-91, though the district re-gained only half of the inhabitants it lost in the previous nine years. There was rapid expansion of Serampore subdivision. The Census of 1881 forced the Government's attention on the district and three major improvements were made, viz. the reclamation of marshy swamps effected by the Dankuni and Rajapur drainage schemes, the opening of the Tarakeswar Railway and the

establishment of five jute mills and one bone mill which attracted immigrants.

"In the next decade there was but little advance owing to the drain caused by deaths from fever. The Census of 1901 revealed an increase of only 1.4 per cent. Arambagh had a very small increase. Two of the three thanas of Arambagh showed an increase, slight but nonetheless welcome, because quite unexpected. This subdivision was generally looked on as the unhealthiest part of the district and its crops were often damaged by floods from the Damodar. In the Serampore subdivision there was an increase of 3.3 per cent and the Sadar subdivision had a slight falling off of population. Except Pandua there was an advance of 4 per cent.

"Since 1901 there was a gain of about 3.67 per cent, part of which was believed to be due to the influx of immigrants rather than to natural growth. O'Malley in his Census Report of 1911 dwelt at length on the population growth during the decade 1901-11. To quote O'Malley, 'There was an excess of recorded deaths over births during the decade amounting to nearly 36,000, and the birth-rate surpassed the death-rate in only 3 years, viz. 1904, 1909 and 1910. Fever is rife and is a natural consequence of the natural configuration of the country. It is for the greater part a semi-aquatic rice plain traversed by large and small rivers, with low-lying depressions between them; many of the rivers have more or less silted up, and no longer drain the land, which remains swampy and water-logged.'

"During the decade 1911-21, the district suffered a loss by about 0.9 per cent. This decade was the period of depletion for the State of West Bengal as a whole due to outbreak of the great influenza epidemic. The rural areas of the district especially Arambagh subdivision fared worse than in the previous decade while the contrast between industrial and rural areas was exaggerated. The adjoining rural parts of Serampore which showed improvements in the previous decade now showed considerable loss. The Sadar subdivision fared much as in the previous decade though Chinsura and Magra showed an increase of about 7.8 per cent. The large increase in Serampore, Uttarpara, and Bhadreswar is solely due to the immigration of mill hands. The recorded birth rate in the district fell very low in 1913-14 compared with the level in other districts. . . .The death rate was higher in 1912-1913 than in succeeding years before the influenza outbreak. It rose to 47.2 (per cent) in 1918, but was down again to 36.1 (per cent) in 1919 and 35.6 (per cent) in 1920.

"The Census of 1931 marked an increase of 3.3 per cent in the district. In spite of the decrease in some police stations all the subdivisions recorded an increase. In the Sadar subdivision Pandua, Balagarh, Chinsura and Magra increased, the last two police stations having shown an increase of 10.2 per cent and 31.5 per cent. In all these areas improved measures of public health might be the cause

of the increase. . . .In Magra and Pandua there had been an increase in the number of rice mills leading to an increased immigration of Santhals, Bauris and other aboriginals who were also bringing waste land under cultivation. In the Serampore subdivision the largest increase had been in the Uttarpara police station. There was some improvement in the sanitary condition of this police station but the main cause for the increase was the establishment of a large number of brickfields and the increasing popularity that it gained to the workers in Howrah and Calcutta city as their suitable place of residence and particularly the construction of the Willingdon Bridge and the Calcutta Chord Line which were in process at the time of the Census. Tarakeswar registered a little growth. In the interior of the police station malaria was still prevalent and was said to be leading to a decrease in population, whilst Tarakeswar proper was reported to be a growing commercial centre where conditions of health were improving. Serampore police station was practically an urban area by then and was also becoming popular as a place of residence for clerical workers in Calcutta. . . .In Singur and Chanditala also the increasing popularity of localities outside Calcutta and Howrah as a residence for workers in these cities together with the advent of temporary Santhal labourers had resulted in an increase of population although these police stations were reported to be malarial. In the Arambagh subdivision the two police stations which showed the greatest increase were Pursurah and Khanakul. These together with the eastern portion of the Arambagh subdivision being located in the spill area of the Damodar river were comparatively free from epidemic or endemic diseases. In some places the fertility of the soil had actually increased, and there was some movement of population within each police station according as the lands of the different *mauzas* were improving or deteriorating. Unlike Pursurah and Khanakul, Goghat police station in which a decrease of 5.8 per cent was recorded was partly outside the reach of the Damodar floods and in the south was waterlogged owing to the defective outlet for the streams, Amodar and Tarajuli, whilst malaria was said to be still prevalent throughout the entire police station.

"The decade 1931-41 was a period of steady increase of population all through the district. There was no event of outstanding importance in this decade likely to affect the growth of population. The outbreak of World War II in 1939 made the mill wheels hum again full steam.

"The district was not in the direct famine-zone during the great famine of 1943 but suffered from epidemic in 1944. On an analysis of percentage of children (0-5) to total married women of the age-group 15-40 in 1951, A. Mitra observes that this percentage 95.1 plainly bears a great stamp of the epidemics of 1944. Mitra in his

celebrated Census Report of 1951 says, 'Hooghly is the product of dead and dying rivers and the growth of its population outside the industrial area therefore directly depends on the state of these rivers and the drainage they succeed in accomplishing. In his census report of 1901 E. A. Gait doubted whether the district would ever fully recover its losses until the drainage problem was solved. That consummation is still remote even in 1951.'...

"In the Census of 1961 the increase is 39.10 per cent. Sadar subdivision's gain is maximum (45.6 per cent) and next comes Serampore subdivision, which gained a little more than that of the district itself. Arambagh subdivision registered an increase of 37.1 per cent while Chandernagore has grown least during the last decade in comparison to other parts of the district."

Rural-Urban distribution of population

Of the total area of 3,139.08 sq. km. (1,212 sq. miles) in the district, 3,026.42 sq. km. (1,168.5 sq. miles) are rural and 112.67 sq. km. (43.5 sq. miles) urban. Eleven municipal towns, viz. Bansberia, Hooghly-Chinsura, Chandernagore, Bhadreswar, Champdani, Baidyabati, Serampore, Rishra, Konnagar, Uttarpara-Kotrung and Arambagh and four non-municipal towns, viz. Pandua, Singur, Tarakeswar and Nabagram Colony share the urban areas between them. As many as 16,52,135, or a little over 74 per cent of the population of the district, live in the countryside and 5,79,283, or a little less than 26 per cent, live in the urban regions. The percentage of city-dwelling people in the district is higher than the corresponding percentage for the State which stands at 24.4. In 1901 out of a total of 10,49,282 persons in the district, 9,15,390 or 87.3 per cent lived in rural and 1,33,892 or 12.7 per cent lived in urban areas. In 1931, the corresponding percentages were 81.8 and 18.2 respectively.

The distribution of population between the urban and rural zones is far from even in the various subdivisions. Serampore has the highest concentration of urban population in the district where 46.1 per cent of the subdivisional population live in urban areas. Five municipal and one non-municipal towns are huddled together in this smallest and most industrialized subdivision of the district. The urban strip from Uttarpara in the south to Baidyabati on the north and lying mostly between the Bhagirathi in the east and the main line of the Eastern Railway on the west includes, in a continuous succession, the municipal towns of Uttarpara-Kotrung, Konnagar, Rishra, Serampore and Baidyabati and the non-municipal town of Nabagram Colony which together form a close-linked chain of industrial settlements with no rural belts in between. Industrial expansion has led to a phenomenal growth of population in this area. For instance, population grew in Uttarpara town at the rate of 20.8 per cent per decade from 1901 to 1961 and in Serampore town at the rate of 15.9 per cent per decade over the same period.

In the Chandernagore subdivision, the industrial zones of

Champdani and Bhadreswar and the more or less residential area of Chandernagore lie in an almost uninterrupted succession to the north along the western bank of the Bhagirathi. Although industrial concentration tapers off a little towards the north of this subdivision, 33 per cent of its population still reside in urban areas and Chandernagore town itself has registered an average growth of 17.9 per cent per decade over a 60-year period from 1901.

The conurbation of Calcutta-Howrah cities in its growth from south to north crosses the Chandernagore subdivision and continues through Chinsura-Hooghly to Bansberia-Tribeni. With a shrinkage in industrialization in this region, except in its extreme north, the Sadar (Hooghly) subdivision exhibits a noticeable downward trend in the percentage of urban population reflected in the fact that only 20.6 per cent of its people live in urban areas. Chinsura, the headquarters of the district, is primarily an administrative town, where white-collar workers predominate as residents. Although an industrial complex of great consequence has grown over the years in the Bansberia-Tribeni-Bandel-Sahaganj area, Hooghly-Chinsura has more or less retained its old character as a residential and administrative town. The urban belt in this subdivision, again, is neither so concentrated nor so uninterruptedly contiguous as in the other two subdivisions immediately to its south.

Arambagh is the least industrialized and urbanized of all the subdivisions of the district. Arambagh town, having the only municipality in the subdivision, has no industrial base and is more or less a rural mart which thrives on agricultural and handicrafts trade. According to the Census of 1961, Arambagh town had a population of 16,551, the smallest of all municipal towns in the district, which has grown at the rate of 13.7 per cent per decade from 1901 to 1961. Only 3.5 per cent of the population of the subdivision was found in 1961 to live in the solitary urban area.

From the point of view of social economy and occupational structure, non-municipal towns like Pandua, Singur and Tarakeswar are no more than overgrown villages which owe their growth to trade in agricultural commodities. Nabagram Colony in Serampore sub division is the largest of the non-municipal towns with a population of 8,866 persons who are mostly refugees from East Pakistan.

According to the Census of 1961, there were 1,911 villages in the district covering 97 per cent of its total area. A village, for the purposes of census as also of criminal and civil administration, is conterminous with a revenue *mauzā*, which may or may not contain more than one populated village. There were 2,383 such villages in the district in 1901, 2,202 in 1911, 2,187 in 1921, 2,180 in 1931, 1,908 in 1941, 1,906 in 1951 and 1,911 in 1961. One probable reason for the gradual decline in the number of villages over the 60-year period from 1901 to 1961 may be the extension of urban areas, a process

which has engulfed many of the adjacent hamlets. There has also been a sizeable reduction in the number of villages owing to the jurisdictional changes that has taken place from time to time while delimiting district boundaries. Thirdly, to cut down collection costs of land revenue, many of the *mauzās* have been amalgamated thus reducing their number.

The district has an average of 164 villages or *mauzās* per 100 square miles of rural areas as against the State average of 115 villages over the same area. "In Chandernagar subdivision the distribution of villages shows the most congregated pattern. The police stations where one square mile of rural area contains two or more villages on an average are Chinsura, Dhaniakhali, and Magra in the Sadar subdivision, Haripal in Chandernagar subdivision and Jangipara in Serampore subdivision."[3] In Arambagh subdivision the villages are relatively sparsely situated and Khanakul police station has the most distantly situated villages in the district.

"In the State of West Bengal 686 persons reside in a village on an average. . . .As many as 865 persons are found to be living in one inhabited village (in the Hooghly district—Ed.) on an average. In Serampore subdivision each of the three police stations of Serampore, Uttarpara and Chanditala shows the average number of persons per inhabited village to be quite high. In Uttarpara this number is as high as 2,407. In the Sadar subdivision, Chinsura police station alone shows this number to be exceeding the district average. Bhadreswar and Singur are two such police stations in Chandernagore subdivision. Pursurah and Khanakul police stations of Arambagh subdivision also give such an indication."[4] Of the villages of Hooghly, 41.10 per cent, which contain only 13.69 per cent of the total rural population of the district, have less than an average of 500 people each. In 1951, 56.77 per cent of the villages of the district, containing 24 per cent of the total rural population, had less than 500 people apiece on an average. 13.59 per cent of villages, containing 28.98 per cent of the rural population, contain between 1,000 and 1,999 persons per village. In 1951, only 9.14 per cent of the villages, which contained 24.76 per cent of the total rural population, were of similar size. 5.6 per cent of villages of the district, inhabited by 25.14 per cent of the total rural population, have from 2,000 to 4,999 persons per village. In 1951, only 3.15 per cent of villages, containing a total of 19.32 per cent of the rural population, were of this magnitude. 0.68 per cent of villages, accommodating 5.95 per cent of the rural population, shelter between 5,000 and 9,999 persons per village. In 1951, 0.30 per cent of villages, containing 1.44 per cent of the total rural population, were of this nature.

In point of population Makhla in Uttarpara police station with 9,601 residents is the largest village in the district. It is adjacent to Uttarpara town and lies immediately to the west of the Eastern

Railway's main line. Of the working people of the village 69.6 per cent earn their living from industries other than household industries. The next biggest village is Bara Kamalapur in Singur police station inhabited by 8,826 persons. Rajbalhat in Jangipara police station has a population of 8,350 persons most of whom are weavers. The same is the case with Begampur in Chanditala police station where 1,481 out of a total working population of 2,834 persons (in a total population of 5,077) are workers engaged in household industries of which weaving is the principal vocation. Among the other big villages of the district mention may be made of Boinchi (5,352 persons) in Pandua police station, Champadanga (5,089 persons) in Tarakeswar police station and Janai (6,387 persons) in Chanditala police station.

The following table gives subdivision and thanawise distribution of population between urban and rural areas as obtaining in 1961.

SUBDIVISION AND THANAWISE DISTRIBUTION OF RURAL AND URBAN POPULATION IN HOOGHLY DISTRICT : 1961

District/Subdivision/ Police Station/Town		Area in sq. miles (1 sq. mile= 2.59 sq. km.)	Total No. of persons enumerated (including inmates of institutions and houseless persons)
HOOGHLY DISTRICT	Total	1,212.0	22,31,418
	Rural	1,168.6	16,52,135
	Urban	43.5	5,79,283
Sadar Subdivision	T	446.1	6,62,043
	R	435.1	5,25,317
	U	11.0	1,36,726
Chinsura P.S.	T	14.5	1,07,697
	R	8.5	24,593
	U	6.0	83,104
Hooghly-Chinsura (M)	U	6.0	83,104
Polba P.S.	R	110.3	1,14,230
Dhaniakhali P.S.	R	106.2	1,37,505
Pandua P.S.	T	110.6	1,23,345
	R	109.1	1,15,186
	U	1.5	8,159
Pandua (N.M.)	U	1.5	8,159
Balagarh P.S.	R	79.5	96,787
Magra P.S.	T	25.0	82,479
	R	21.5	37,016
	U	3.5	45,463
Bansberia (M)	U	3.5	45,463
Chandernagore Subdivision	T	193.5	4,88,049
	R	181.0	3,26,883
	U	12.5	1,61,166
Chandernagore P.S.	T	3.7	67,105
	U	3.7	67,105
Chandernagore (M.C.)	U	3.7	67,105
Bhadreswar P.S.	T	15.4	95,769
	R	10.4	18,151
	U	5.0	77,618
Bhadreswar (M)	U	2.5	35,489
Champdani (M)	U	2.5	42,129

Contd.

District/Subdivision/ Police Station/Town		Area in sq. miles (1 sq. mile= 2.59 sq. km.)	Total No. of persons enumerated (including inmates of insititutions and houseless persons)
Singur P.S.	T	56.9	1,28,574
	R	54.4	1,20,659
	U	2.5	7,915
Singur (N.M.)	U	2.5	7,915
Haripal P.S.	R	71.2	1,11,823
Tarakeswar P S.	T	46.3	84,778
	R	45.0	76,250
	U	1.3	8,528
Tarakeswar (N.M.)	U	1.3	8,528
Serampore Subdivision	T	160.0	5,73,311
	R	147.5	3,08,471
	U	12.5	2,64,840
Serampore P.S.	T	22.4	1,97,345
	R	15.4	22,977
	U	7.0	1,74,368
Baidyabati (M)	U	3.5	44,312
Serampore (M)	U	2.3	91,521
Rishra (M)	U	1.3	38,535
Uttarpara P.S.	T	11.2	1,12,138
	R	5.7	21,666
	U	5.5	90,472
Konnagar (M)	U	1.7	29,443
Kotrung (M)	U	2.00	31,031
Uttarpara (M)	U	0.8	21,132
Nabagram Colony (N.M.)	U	1.0	8,866
Chanditala P.S.	R	63.1	1,66,884
Jangipara P.S.	R	63.3	96,944
Arambagh Subdivision	T	412.5	5,08,015
	R	405.0	4,91,464
	U	7.5	16,551
Goghat P.S.	R	145.3	1,24,512
Arambagh P.S.	T	115.0	1 32,765
	R	107.5	1,16,214
	U	7.5	16,551
Arambagh (M)	U	7 5	16,551
Khanakul P.S.	R	113 4	1,76,853
Pursura P.S.	R	38.8	73,885

N.B. In the above table 'P.S.' represents a police station, 'M' a municipal town, 'N.M.' a non-municipal town and 'M.C.' a municipal corporation.

Sex ratio

In West Bengal males have always outnumbered females since 1901 and the Hooghly district is no exception to this rule. In 1901 there were 982 females per thousand males in the district giving a proportion higher than the West Bengal ratio of 945 females per 1,000 males for the same year. In 1931 there were 879 females per 1,000 males in the district as against the West Bengal ratio of 890 females per thousand males. In 1961 Hooghly had 892 females per 1,000 males compared to 878 females per thousand males in the State.

Sex ratio significantly varies between urban and rural areas; the disparity between males and females is invariably higher in the former than in the latter. In 1901 there were 1,027 females per 1,000 males

in the rural areas as against only 760 females per thousand males in the urban areas of the district. Comparative figures for West Bengal as a whole for the same year were 994 females per 1,000 males in rural and 652 females per 1,000 males in urban areas. In 1931 there were 956 females per 1,000 males in the rural areas of the Hooghly district as against 961 females per thousand males in the whole of West Bengal. In the same year there were 627 females per thousand males in the urban areas of the district as against 578 females per 1,000 males in the urban regions of West Bengal. In 1961 the female to male ratio in the rural areas of the district was 948 : 1,000 as against 943 : 1,000 for the whole of West Bengal and in the urban areas of the district the proportion was 749 : 1,000 as against the State ratio of 701 : 1,000. The conclusion would, therefore, be justified that the sex ratio of the district has always been better balanced than that of the State taken as a whole. Within the district, again, the rural areas show a fairer equilibrium than the urban regions. Even in 1901 when the district sex ratio was nearest to exact parity (982 females : 1,000 males), that for the urban areas of the district was only 760 females per 1,000 males. Significantly, in 1901 and in 1911 the ratio of females to males in the rural areas of the district was 1,027 : 1,000 and 1,014 : 1,000 respectively.

According to the Census of 1961, Khanakul in Arambagh subdivision is the only police station in the district where females outnumber males. In this wholly rural thana there are 1,014 females per thousand males. Sex ratio in Goghat police station, again a wholly rural thana, would appear to be most balanced in the district with 999 females to every 1,000 males. The rural areas lying to the west of the Eastern Railway's main line and to the east of the Damodar river as also those within the jurisdiction of Arambagh subdivision show a fair balance in the proportion between females and males. In Jangipara and Chanditala police stations the ratios are 980 : 1,000 and 933 : 1,000 respectively. Tarakeswar, Haripal and Singur police stations also exhibit a higher proportion of females than the district average. The same is true about the thanas of Dhaniakhali, Polba, Pandua and Balagarh in Sadar (Hooghly) subdivision. In the urban industrial strip of the district bordering the Bhagirathi, the males far outnumber the females in all the thanas. But significantly enough, the sex ratio in Chinsura and Chandernagore thanas is not as unbalanced as in the more industrialized police stations of Serampore, Uttarpara and Bhadreswar. The sex ratio of Chinsura and Chandernagore (which are primarily residential and not industrial towns) is more balanced than that in the relatively non-industrialized urban areas of Arambagh police station. Magra P.S., with a big industrial complex in the Tribeni-Bansberia-Bandel-Sahaganj region, has one of the most unbalanced sex ratios in the urban areas of the district. The urban sex ratio within the jurisdiction of the Bansberia Munici-

pality in this thana is 686 females per 1,000 males. The lowest sex ratio, however, occurs in Bhadreswar P.S. where there are only 671 females for every 1,000 males. Within the municipal limits of Uttarpara town the sex ratio is 769 : 1,000 but in the rural areas of the same police station it is only 623 females per 1,000 males. The latter figure, though surprising for a rural area, is explained by the fact that the western fringes of Uttarpara town have lately assumed a highly urban character. A large number of males living in this technically rural region earn their livelihood from industrial occupations. Many of them are first-generation immigrants who live in these villages away from their wives and children.

In conclusion, it may not be speculative to say that the marked rural-urban difference in the sex ratio of this district is indicative of selective immigration of the male population from the rural areas of the district, other districts and even from neighbouring States to the industrial areas of Hooghly in search primarily of employment and to some extent of education.

SEX RATIOS IN THE DISTRICT OF HOOGHLY: CENSUS 1961

State/District/Subdivision/Thana	Females per 1,000 males		
	Total	Rural	Urban
WEST BENGAL	878	943	701
HOOGHLY DISTRICT	892	948	749
Sadar Subdivision	906	936	798
Chinsura	840	759	865
Polba	955	955	—
Dhaniakhali	961	961	—
Pandua	935	945	800
Balagarh	960	960	—
Magra	749	835	686
Chandernagore Subdivision	859	924	739
Chandernagore	841	—	841
Bhadreswar	671	855	633
Singur	922	923	902
Haripal	927	927	—
Tarakeswar	932	940	866
Serampore Subdivision	824	919	725
Serampore	725	903	703
Uttarpara	739	623	769
Chanditala	933	933	—
Jangipara	980	980	—
Arambagh Subdivision	991	997	834
Goghat	999	999	—
Arambagh	970	991	834
Khanakul	1,014	1,014	—
Pursura	965	965	—

Density of population

Hooghly is the most densely populated district in West Bengal after Calcutta and Howrah district. According to the Census of 1961, an average of 1,841 persons inhabit each square mile of its area. The

corresponding figure for West Bengal is 1,021 persons per square mile. In 1901 and 1931 the population densities for the district were 888 and 942 per square mile respectively.

Subdivisionwise density

"The highest density in the district is found in the Serampore subdivision, where on an average 3,583 persons are found to be living in one square mile. . . .This subdivision contains the largest number of towns and the rural area lying just behind the towns upholds the picture of only a semi-urban tract."[5] In 1931 the population density of this subdivision was 1,727 and in 1901, 1,473 persons per square mile. Chandernagore subdivision, with a population density of 2,522 persons per square mile according to the 1961 Census, is the second most crowded subdivision of the district. The corresponding densities for this subdivision in 1901 and 1931 were 1,056 and 1,304 persons per square mile respectively. In the Sadar (Hooghly) subdivision, the corresponding figures were 691, 728 and 1,484 persons per square mile in 1901, 1931 and 1961 respectively. Arambagh subdivision, with only one municipal town in it, is the most sparsely populated, accounting for only 1,232 persons per square mile according to the Census of 1961.

Density in urban areas

During the census count of 1961 the urban areas of the district registered an overall density of 13,348 persons and the rural regions a density of 1,414 persons per square mile. In other words, urban Hooghly was 9.4 times more crowded than its rural counterpart. But this had not always been so. In 1931 the urban zones of the district were only 6.8 times more densely populated than the rural tracts; the urban areas then accommodated 5,319 persons per square mile as against 779 persons in the rural areas. In 1901 the urban-rural population density of the district was of the order of 4.7 : 1 with 3,703 people to a square mile in the urban localities and 783 persons per square mile in the rural tracts.

The concentration of population in the urban areas of Serampore subdivision, containing five highly industrialized municipal and one non-municipal towns and many semi-urban villages, is as high as 21,238 persons per square mile. Uttarpara thana in this subdivision, where 10,012 persons live within each square mile, has one of the highest population densities among all police stations in the district. The highest density, however, is found in the wholly urban thana of Chandernagore having 17,991 persons to a square mile in 1961. Chandernagore P.S. has enjoyed this position of pre-eminence ever since 1901 when it sheltered 7,199 persons per square mile, which figure rose to 7,309 persons per square mile in 1931. The rate of growth of population density has, however, been higher in the Uttarpara police station which had 628, 4,818 and 10,012 persons per square mile in 1901, 1931 and 1961 respectively thus accounting for an increase of 767.4 per cent between 1901 and 1931 and 207.8 per cent between 1931 and 1961.

Density in some towns

Serampore leads the municipal towns of the district with a population density of 40,318 persons per square mile. Next comes Rishra with 30,820 persons to a square mile. At the other end of the scale are Hooghly-Chinsura and Arambagh having population densities of 12,430 and 2,209 persons per square mile respectively. As regards Arambagh it is interesting to note that over a 60-year period from 1901 to 1961 its density of population has increased by less than 100 per cent.

Density of population in rural areas

In the rural areas of the district, highest density figures are provided by the non-municipal areas of Uttarpara police station where 3,801 persons on an average live within each square mile. Chanditala and Jangipara, which are wholly rural thanas in the Serampore subdivision, have high population densities of 2,645 persons and 1,532 persons per square mile respectively. The tract now comprising these two police stations was once watered and drained by live rivers like the Saraswati, the Kausiki etc. With the gradual silting up of these channels of trade and commerce, the once-crowded villages in this region suffered greatly in population and prosperity. The area, however, became residentially more attractive through the execution of the Dankuni Drainage Scheme in 1873, the Rajapur Drainage Scheme in 1880, the Eden Canal in 1881 and re-excavation of the Kausiki in 1910. The Damodar skirts the western fringe of Jangipara thana and flows past several thickly populated old villages like Rajbalhat, Guti-Atra etc.

It is indeed very interesting to study the vitalizing role played by the Saraswati and the Damodar in the history of human settlement in the district. According to Van den Broucke s map of 1660, the Damodar flowed in an easterly course to meet the Bhagirathi near Naya Sarai through the tracts now comprised in the thanas of Pandua and Magra. Since then it has shifted its course towards a more southerly direction benefiting at successive stages many important old villages in Dhaniakhali, Polba, Tarakeswar, Haripal and Singur police stations. The Saraswati, in her southerly course, used to flow through the areas now comprised in the thanas of Magra, Polba, Singur and Chanditala where many big villages, trading marts and handicrafts centres had once flourished. The same is true of the Kausiki or other rivers which are now derelict. Gradual silting up of these rivers or the shifting of their course has considerably changed the settlement landscape of the district.

The population density in the rural areas of Chinsura P.S. is second only to that of the Uttarpara police station, the relative figures being 2,894 and 3,801 persons per square mile respectively. The density of population in the rural areas of Magra thana is also very high—1,722 persons to the square mile. The densities in Polba, Pandua and Dhaniakhali police stations are 1,036, 1,115 and 1,295 respectively. The police stations of Singur (2,260 persons per square

mile), Tarakeswar (1,831 persons per square mile) and Haripal (1,571 persons per square mile) in Chandernagore subdivision are so packed with people that the Singur and Tarakeswar *mauzās* had to be regarded as non-municipal towns for the purpose of the 1961 Census. It appears from the Census Report of 1901 that as far back as in 1872 Singur, Tarakeswar and Haripal were populous villages. But the population decreased between 1872 and 1881 on account of the fever epidemic. With the excavation of the Eden Canal and the construction of the Seoraphuli-Tarakeswar Branch of the Eastern Railway, both in 1885, agriculture and trade got a fillip leading to a corresponding growth in population in these areas.

In Arambagh subdivision, Goghat P.S. had a density of 735 persons per square mile in 1901 which increased to only 857 for the same area in 1961. According to the Census of 1961, the population densities in the rural areas of Arambagh P.S. and in the Khanakul and Pursura thanas (both of which are wholly rural) are 1,081, 1,560 and 1,904 persons per square mile respectively. "The density of Khanakul was even higher in 1872 than in 1951: it was as much as 1,192. But between 1891 and 1931 it suffered from malaria and depopulation and the density was as low as 809 in 1921 after the influenza epidemic. It benefits from the river trade of the Rupnarayan which skirts its western boundary: besides, it is very well-cultivated and cottage industries are still comparatively prosperous. Together with Pursura it makes a compact block of high density and similar geographical, agricultural and population characteristics west of the Damodar."[6]

Pressure of agricultural population on agricultural land

Except the Goghat thana which has a lateritic soil in certain parts, the rest of the district consists of new alluvium. Washed by a number of rivers flowing at close intervals from each other, the rural tracts of the district are generally very suitable for agriculture. From 1850 onwards, with the construction of railways, roadways and irrigation canals, agriculture in the Hooghly countryside has become all the more profitable. The phenomenal growth of the Greater Calcutta area over the last century has considerably added to the importance of this hinterland. Hooghly suffers relatively less from floods and droughts than other districts of the Rarh region. All these factors have contributed to the generation of a high population pressure on the cultivable lands in the district. In 1960-61 Hooghly had a total area of 7,75,700 acres of which 600 acres were under forest,* 1,54,500 acres were used for urban, industrial, transport and such other purposes, 24,500 acres were variously uncultivable on technical grounds, 7,500 acres belonged to the category of current fallow and 5,88,600 acres constituted the net area sown that year.[7] There were approximately 1,58,680 households belonging to owner-cultivators and share-croppers. An average household in the Hooghly

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* The Divisional Forest Officer, Burdwan places this area at 730.6 acres.

district consists of 5.27 persons. Thus the owner-cultivators, share-croppers and their dependants number about 8,36,244 persons. Besides this group, landless peasants also depend on the same agricultural lands and their number in the district, according to the 1961 Census, was 1,34,188. None of the Census reports, however, mentions the number of households of landless agricultural labourers. We know that the number of cultivators and their dependants (8,36,244) is roughly four times the number of persons actually working as cultivators (2,06,138). This ratio of 4 : 1 could have applied to the agricultural labour population but for the fact that the landless labourers are generally incapable of raising families as large as those of the owner-cultivators and share-croppers. A large percentage of landless labourers (35.3%) comes from the Scheduled Castes and Scheduled Tribes. They number 97,778 in the district. A study of the population pattern in their families shows that there are approximately as many dependants in each family as there are workers in it. So the total population supported by this category of landless labourers is twice 1,34,188 or 2,68,376. The total number of persons of all descriptions depending on agricultural lands in the district thus comes to about 11,04,620 (8,36,244 plus 2,68,376). In 1961-62, 931.41 sq. miles of land (5,88,600 acres of net sown area and 7,500 acres of current fallow lands) were available for cultivation in the district. Therefore, the density of agricultural population in Hooghly may be taken as 1,186 persons per sq. mile of agricultural land.

VARIATIONS IN POPULATION DENSITY (PERSONS PER SQUARE MILE) IN HOOGHLY DISTRICT BETWEEN 1901 AND 1961

District/Subdivision/Police Station	1961	1931	1901
HOOGHLY DISTRICT	1,841	942	888
Sadar (Hooghly) Subdivision	1,484	728	691
Chinsura	7,427	2,816	2,953
Polba	1,036	600	394
Dhaniakhali	1,295	696	900
Pandua	1,115	621	621
Balagarh	1,217	583	559
Magra	3,299	1,156	541
Chandernagore Subdivision	2,522	1,304	1,056
Chandernagore	17,991	7,309	7,193
Bhadreswar	6,219	3,724	984
Singur	2,260	1,187	1,151
Haripal	1,571	821	774
Tarakeswar	1,831	902	903
Serampore Subdivision	3,583	1,727	1,473
Serampore	8,810	3,027	3,189
Uttarpara	10,012	4,818	628
Chanditala	2,645	1,610	1,576
Jangipara	1,532	836	911
Arambagh Subdivision	1,232	698	794
Goghat	857	539	735
Arambagh	1,154	609	678
Khanakul	1,560	868	875
Pursura	1,904	1,061	1,118

RURAL AND URBAN VARIATIONS IN POPULATION DENSITY FOR THE WHOLE OF THE HOOGHLY DISTRICT

	1961	1931	1901
Total	1,841	942	888
Rural	1,414	779	783
Urban	13,348	5,319	3,703

Migration

According to the Census of 1961, there are in all as many as 5,00,641 immigrants into the district from other districts in West Bengal, other States within the Indian Union and from other countries, of whom 2,73,163 are males and 2,27,478 females. Immigrants thus constitute no less than 22.43 per cent of the total population of the district. Corresponding figures for 1901 and 1951 were 1,39,714 (13.3 per cent) and 3,20,941 (20.6 per cent) respectively.

According to the 1961 Census, 2,93,474 or 58.6 per cent of the immigrants reside in the urban areas of the district while 2,07,167 or 41.4 per cent of them inhabit the rural areas. The male : female ratio among immigrants in the urban areas is 61% : 39% whereas in the rural areas of the district it is 45.6% : 54.4%. One of the reasons for this preponderance of female over male migrants in the rural areas is to be found in the marriage customs of the people of the district who usually enter into marital relations with those of the neighbouring districts of Howrah, Burdwan, Bankura, Midnapur and Nadia. As residence is, in most cases, patrilocal, brides from these neighbouring districts come to stay with their husbands' families in this district. Another reason is that the males who migrate into the district, generally do so in search of employment. As the already over-crowded agricultural sector has little scope for absorbing them, they throng the urban areas for better opportunities. Many of the immigrants from other parts of the country find the maintenance of families in costly urban areas beyond their reach and, accordingly, leave their womenfolk at home.

The largest number of immigrants into the district are from other districts of West Bengal. Their total number, according to the Census of 1961, is 2,06,508 (41.2 per cent) of whom 79,820 live in urban and 1,26,688 live in rural areas. Of the urban group, 40,533 are males and 39,287 females and of the rural group, 43,147 are males and 83,541 females.

Among migrants from other States, the number of those from Bihar is the largest. According to the Census of 1961, there are 98,103 migrants from Bihar constituting about 19.6 per cent of total immigrant population of the district, of whom 71 per cent live in urban and 29 per cent live in rural areas. Males preponderate among both the

urban and rural Bihari immigrants, being 75.4 and 73 per cent of the totals respectively.

Immigrants from Uttar Pradesh (numbering 23,580 or 4.7 per cent of the total immigrant population of the district according to the Census of 1961) form the next largest group. Of them 19,718 or 83.6 per cent live in the urban areas. 72.4 per cent of this group are males and the rest females. The Orissan contingent number 17,544 and constitute 3.5 per cent of the total number of immigrants into the district.

A large number, about 44 per cent, of the immigrants from other States of India are employed as skilled and unskilled labourers (which description applies to some extent even to the immigrants from the neighbouring districts of West Bengal) in various manufacturing and servicing industries (other than household and cottage industries). Similarly, every fifth woman migrant at work is found to be engaged in a manufacturing industry. Most of the female immigrants are engaged as agricultural labourers, who alone account for 37 per cent of their total number. Amongst the males the percentage of workers engaged as cultivators and agricultural labourers are 5.2 and 8.5 respectively. 3.7 per cent of the male immigrants are engaged in construction works, 7.4 per cent in transport and communication, about 10 per cent in trade and commerce and 16.3 per cent in other services.

Participation in some economic pursuit or other by the migrant population is higher in proportion than what obtains among the general populace. During the Census enumeration of 1961, 42.8 per cent of the immigrants were returned as workers.

It is needless to say that most of the immigrants into the district are Indian nationals. In 1961 persons of non-Indian origin in the district numbered 1,301; in 1951 their number was 5,650. Most of these people are Pakistanis; in 1961 their number was 778 and in 1951, 5,308. The precipitate reduction in the number of Pakistani nationals can be attributed to two factors. First, many Hindus from East Pakistan who migrated in the wake of the Partition and subsequent communal riots of 1950 were counted as Pakistani nationals during the 1951 Census but most of them became Indians by 1961 through the process of naturalization. Secondly, the number of Pakistani nationals decreased after the introduction of travel restrictions between the two countries. The Census of 1961 shows 259 Nepali and 161 British nationals residing in the district. The latter account for only 3.8 per cent of the total British population in West Bengal.

Displaced persons

According to the Census of 1951, between 1946, i.e. a year before the Partition of India when large scale communal riots occurred, and February 1951, altogether 51,153 persons (males 26,844, females 24,309) belonging to the minority communities in Pakistan moved into the district of Hooghly as displaced persons. Almost all of them

were from East Bengal districts although a very small number came from West Pakistan. Persons from all the 16 districts of East Bengal (until then the province was named East Bengal and not East Pakistan) were there but those from Dacca, Barisal and Faridpur were in a majority.[8]

The following account is based on a report dated 23 June 1966 furnished by the District Rehabilitation Officer, Hooghly. The total number of displaced persons from East Pakistan who have settled in Hooghly district up to the end of the financial year 1965-66 is 85,169, of whom 50,398 are males and 34,771 females. They are grouped into 15,770 families which accounts for an average of 5.4 persons per family consisting of 3.2 males and 2.2 females.

34,942 displaced persons (21,087 males and 13,855 females), grouped into 637 families, live in Government sponsored colonies in the district. There are 23 such Government colonies in the Sadar (Hooghly) subdivision giving shelter to 18,298 persons in 3,935 families. Nine of these are in Chinsura, 5 in Balagarh, 3 each in Pandua and Magra, 2 in Dhaniakhali and one in Polba police station. Colonies No. I and II at Jirat in Balagarh P.S., established respectively in October and December 1950, are the earliest of such units and they together form the largest Government Colony in the subdivision accommodating 2,412 persons distributed in 488 families. The latest of the colonies within the subdivision was set up in March 1965 at Balagarh (J. L. No. 8 in the Hooghly-Chinsura municipal area) housing 146 members of 45 families. In Serampore subdivision, there are 5 Government-sponsored colonies in Uttarpara and 4 in Serampore P.S. which together provide shelter to 11,539 persons in 2,784 families. The earliest of these organizations was founded in May 1951 at Makhla in Uttarpara P.S. and the largest of them at Kotrung shelters 3,065 persons divided into 727 families. Kanaipur Colony in Uttarpara thana, the latest in the subdivision, came into being in September 1962. In Chandernagore subdivision there are 6 colonies, 4 in Bhadreswar and 2 in Chandernagore P.S., which look after 5,115 persons belonging to 918 families. Bhadreswar Colony No. I, founded in August 1954, happens to be the earliest whereas the latest of them is Colony No. IV of Chandernagore set up in January 1964.

Besides the sponsored colonies for which Government acquired land or regularized the otherwise acquired land to settle the displaced persons, another scheme, known as the Bainanama Scheme, is also in operation under which Government provides grants and loans for purchase of land and house-building to those of the displaced persons who could not find any accommodation in the Government colonies. Altogether 15,627 persons, distributed in 2,889 families, have been settled in the district under this scheme. Of them, 9,302 are males and 6,325 females. Within the limits of Chinsura police station 1,278

families comprising 8,390 heads have been settled under the scheme and in Magra P.S. 195 families consisting of 975 persons have been rehabilitated. In Bhadreswar P.S. 2,936 persons distributed in 587 families and in Chandernagore P.S. another 1,615 persons belonging to 383 families have been similarly settled. Serampore thana, in a like manner, has offered settlement to 1,088 persons in 286 families and Uttarpara to 624 persons in 159 families.

In the early fifties, when the colossal problem of settlement of displaced persons was posing a challenge to the Government, it asked, at one stage, the then Union Boards (predecessors of the Anchalik Parishads operating now) to share the burden by providing groups of displaced persons with lands within their jurisdictions. The scheme, however, failed to materialize and a modified one was adopted which came to be known as the Union Board Variation Scheme. 6,782 displaced persons in 1,360 families have been rehabilitated under it in different parts of the Sadar subdivision.

Many of the displaced persons, who have settled in the district but have not come under any of the above schemes, have remained statistically unaccountable. We have, however, some information about those of them who, although rehabilitated on their own, have taken some loan or other from the special funds the Government administers for rehabilitation purposes. There are 1,103 of them in 205 families in Chinsura, 280 persons in 62 families in Magra, 380 persons in 37 families in Dhaniakhali, 459 persons in 95 families in Polba, 1,363 persons in 276 families in Balagarh, 1,176 persons in 230 families in Pandua, 1,287 persons in 232 families in Chandernagore, 1,175 persons in 252 families in Bhadreswar, 283 persons in 51 families in Singur, 302 persons in 59 families in Haripal and 147 persons in 27 families in Tarakeswar police stations. No tangible arrangement could be made for the economic rehabilitation of the bulk of displaced persons of this category. Those who received some cultivable land apart from their homestead lands and had been cultivators before, devoted themselves to agriculture. Others, who could not afford to do so, began earning an income by trading in various goods in the near-by markets. Many became petty traders, grocers and shop-keepers. Others, especially those who came of age after the Partition, have taken up employment in manufacturing industries as skilled and unskilled labourers, they being the pioneers in their families to venture into such avocations.

For providing gainful employment to at least a section of the displaced persons now living in Hooghly district, the Refugee Rehabiliation Directorate of the Government of West Bengal has set up a Training-cum-Production Centre at Dharampur for imparting technical education on small-scale industries. The Women's Homes at Bansberia and Bhadrakali teach useful crafts to those displaced women who have to support themselves economically.

LANGUAGE

The Bengali mother tongue group

The Hooghly district, lying at the centre of the fertile plains of the southern Rarh country, has been inhabited, since the early Christian era, by people who have contributed largely to the growth of the main streams of Bengali language and culture. It is, therefore, natural that people having Bengali as their mother tongue will far outnumber those speaking other languages in this region. According to the Census of 1961, 19,65,397 persons, representing 88.1 per cent of the total population of the district, have Bengali as their mother tongue. Of them 10,07,218 (85.4 per cent of the total male population) are males and 9,58,179 (91 per cent of the total female population) are females. Except for the highly industrialized thanas of Uttarpara, Serampore, Bhadreswar and Magra, where wage-earning immigrants from outside the State live in large numbers, the other police stations of the district are inhabited by 80 per cent or more of Bengali speaking people. During the Census of 1961 about 75 per cent of the population of Serampore and Uttarpara, about 50 per cent of the population of Bhadreswar and 64.4 per cent of the population of Magra police station were enumerated as Bengali-speaking.

With rapid industrialization taking place in the eastern parts of the district, a steady decrease in the percentage of Bengali speakers has been accompanied by a corresponding increase in that of Hindi speakers over the 60-year period between 1901 and 1961. It should not, however, be taken to mean that the actual number of the Bengali speaking population is decreasing. It is increasing, but at a much slower rate than the growth of the Hindi speaking population. In the 60-year period from 1901 to 1961 although the Bengali speaking population of the district has increased by 98.3 per cent, the proportion of Bengali speakers to the total population (including all language groups) has decreased from 94.4 per cent in 1901 to 88.1 per cent in 1961 which is a measure of the influx of non-Bengali speaking people into the district over the same period.

The Hindi mother tongue group

In the numerical strength of its speakers, Hindi is the next major mother tongue of the inhabitants of the district. Categorization of languages during the Census of 1961 poses a minor problem for arriving at exact figures of people having Hindi as their mother tongue. Besides returning 1,29,439 persons in the district as Hindi speaking, this Census enumerated 120, 70 and 11 persons as Bihari, Maithili and Bhojpuri speaking respectively. Bihari is not a language, but might possibly be a dialect of Hindi. Even so, the above enumeration does not probably reflect the numerical strength of speakers of this dialect since it is certain that the actual number of immigrants into the district from Bihar is much larger. During the Census of 1901 and 1931 all these linguistic groups were not accorded any separate identity. Whether or not these dialects are separate languages is a debatable question although a few prominent linguists seem to

hold the view that they are. In any case, it would not be far wrong to assume that overwhelming majorities of these linguistic groups preferred to return Hindi as their mother tongue. It would, therefore, be advisable to group them as also only 5 persons speaking Hindustani with the Hindi speakers bringing their total to 1,29,643 or 5.8 per cent of the total population of the district in 1961. They have the heaviest concentrations in the urban and industrial areas of Magra, Bhadreswar, Serampore and Uttarpara police stations, in that order. The bulk of this group is composed of relatively non-permanent immigrants as is evident from their sexwise distribution. Female Hindi speakers in the district number less than half of their male counterparts. The reason for this imbalance has been discussed before. 90,422 persons or 69.8 per cent of the Hindi speaking population are males and they constitute 7.6 per cent of the total male population of the district. Females number 39,221 representing 30.2 per cent of the total Hindi speaking population and 3.7 per cent of the total female population of the district.

As regards the growth of the Hindi speaking population in the district, we find that in 1901 there were 42,928 of them forming 4.1 per cent of the district population whereas in 1911 the corresponding figures had increased to 52,270 and 4.7 per cent respectively. A baffling statistical phenomenon was observed in 1931 when 90,060 persons (8.1 per cent of the district population) were returned as Hindi speakers, 95,361 persons (8.5 per cent of the district population) were enumerated as Hindustani speakers and 5,019 persons (0.45 per cent of the district population) declared themselves as Urdu speakers. The total of the first two categories comes to 1,85,421 persons accounting for 16.6 per cent of the district population which is inconsistent with the established trend of growth of the Hindi speaking population in the district from 1901 to 1931 as also from 1931 to 1961. If the Hindustani and Urdu speaking groups are lumped together on the analogy that Hindustani is as much akin to Hindi as to Urdu, the combined population becomes 1,00,380 accounting for 9 per cent of the district population which, again, is an impossible proposition considering the large number of Hindi speakers left out from this computation. In 1951, 1,07,070 persons, constituting 6.7 per cent of the population of the district, were returned as Hindi speaking and 18,972 persons, forming 1.2 per cent of the district population, declared Urdu as their mother tongue. Hindustani was then given no separate recognition. The 1931 and 1951 figures are dissimilar and do not bear any comparison.

The Santali mother tongue group

Speakers of the Santali language form the third largest linguistic group; there are 69,007 of them* in the district representing 3 per

* 65 persons who returned Mahili and 28 others who returned Pahari as their mother tongue have been grouped with the Santali speaking community

cent of its total population. The males number 34,673 and the females 34,384 constituting 50.24 per cent and 49.76 per cent of the Santali population respectively.

Santali speakers are not autochthones of the district nor does it seem that any sizeable immigration of these people into the district started before 1855. The district's Santali speaking population has, therefore, grown over the last hundred years or so. It is interesting to note that unlike the majority of the non-Bengali speaking immigrants from other States, Santali speakers come to the district to settle down on a relatively permanent basis.

In 1901 there were 9,061 persons of this linguistic group in the district representing only 0.86 per cent of the district population. In 1911 the corresponding figures had increased to 21,891 and 2 per cent respectively. This rate of rapid growth continued unabated till 1931 when Santali speakers numbered 35,702 persons. In a generation from 1901 to 1931 the group had increased by 294.1 per cent against a growth of only 6.1 per cent in the case of the general populace of the district over the same period. The growth rate fell off considerably between 1931 and 1951. In the latter year there were no more than 39,232 Santali speakers in the district accounting for 2.5 per cent of the district population. But the rise in their numbers during the next decade 1951-61 was to the tune of 76.1 per cent. The growth registered by the Bengali and Hindi speaking groups over the same period were 38.8 and 21 per cent respectively.

It is curious that many people who are ethnically and culturally Santals do not declare Santali as their mother tongue. The language, as spoken in the district, borrows heavily from the Bengali vocabulary and the local Santals become efficient bilinguals from their early childhood. This is the principal reason why many of them prefer to return themselves as Bengali speakers. Especially prone to this tendency are those Santals who live in small groups surrounded by Bengalees or attend Bengali schools for their education. Such linguistic environs effectively convert them to Bengali speech and language. During the Census of 1901, 8.9 per cent of the Santals of the district did not return Santali as their mother tongue while the remaining 91.1 per cent did. The corresponding figures in 1931 were 6.1 and 93.9 and in 1961, 6.5 and 93.5 respectively.

Santali speakers are relatively more numerous in the Sadar (Hooghly) subdivision, especially in the Pandua, Polba and Dhaniakhali police stations. About 14 per cent of the population of Pandua P.S. have Santali as their mother tongue. The predominance of Santal agricultural labour in these thanas is mainly responsible for the concentration of Santali speakers in this particular area. They are also found in lesser numbers in the Haripal and Jangipara police stations. A few Santals also live in the uplands of Goghat P.S.

The Urdu mother tongue group

In 1961 Urdu speakers in the district numbered 31,558 forming about 1.4 per cent of its total population. Of them 21,132 or 67 per cent were males and 10,426 or 33 per cent females.

In the Census of 1901, people having Urdu as their mother tongue were not enumerated separately. It is, therefore, difficult to say whether they were grouped with the Hindi speakers. From the number of Persian and Arabic speakers given in the Census Report of 1901—only 141 and 41 respectively—it is also seen that they did not include the Urdu linguistic group. (Some of the problems arising out of the varying methods followed in enumerating the Hindi, Hindustani and Urdu linguistic groups during successive Census operations have been discussed already.)

The difficulty of determining the exact number of people speaking Hindi, Hindustani or Urdu lies in the close resemblance of these languages. While Hindi has its moorings anchored fast to Sanskrit, Urdu is characterized by a relative preponderance of words from Arabic and Persian roots. Yet none of the two languages can claim independence of the Sanskrit, Arabic and Persian vocabularies. Effective verbal communication between these two linguistic groups is not only a theoretical possibility but is a reality. Communication between the Hindustani and Urdu speakers is even more facile. The Hindus who call their language Hindustani, perhaps use less of the terms and words connected with Islamic religious rituals and customs than the Muslims who converse in Urdu; otherwise the two languages are not very much apart. Hindustani commonly uses the Nagri script but the same language, when spoken with a more liberal sprinkling of Arabic and Persian words and written in the Urdu script by, say, a Punjabi Muslim, becomes Urdu; when there is a relative preponderance of Sanskrit words connected with Hindu religion and rituals and written in the Nagri script by a Punjabi Hindu, it becomes Hindustani and when written in the Gurmukhi script by a Punjabi Sikh, it is recognized as Punjabi. Yet a Brahmin or a Kayastha from a traditionally well-to-do and educated family of Western U.P. or Punjab is often found to return Urdu as his mother tongue. Conversely, it is seen that many Muslim peasants from the rural areas of Bihar declare Hindustani (or Hindi) as their mother tongue.

So far as Hooghly district is concerned, Urdu is by and large the mother tongue of Muslim immigrants from Uttar Pradesh and Bihar. That should not, however, mean that all Muslims of northern India who have moved into the district invariably belong to the Urdu mother tongue group. On the contrary, many Muslim immigrants from rural areas of Bihar, where Muslim concentration is not very thick have returned Hindi and/or Hindustani as their mother tongue. Although most of the native Muslims of the district as well as those who have migrated from elsewhere in West Bengal belong

to the Bengali mother tongue group, there are certain Sayyad families in the district who regard themselves as Urdu speakers. These are old families, the members of which hold considerable *āimā* or rent-free agricultural lands and use the title 'Ashraf' after their names. Their matrimonial relations are usually confined to identical families elsewhere in Bengal, or to Sayyad families of North India. Their background prompts them to keep aloof from the common Muslim masses mostly belonging to the Sheikh community.

Urdu speakers are mainly found in the industrial areas of the district. In Magra P.S. they constitute about 7.6 per cent of the thana population. In Bhadreswar and Serampore police stations they account for 10 and 5 per cent of the respective populations. There are also some Urdu speakers in the rural thanas of Pandua and Jangipara.

The Oriya mother tongue group

According to the Census of 1961, Oriya is the mother tongue of 18,246 persons, accounting for 0.8 per cent of the district population. Most people of this group are relatively non-permanent immigrants from Balasore (Baleswar), Cuttack and Sambalpur districts of Orissa who have come to earn a living from urban occupations. Most of them have some landed interests at home where their immediate families and wider kin groups live. Second generation settlers among them are occasionally met with but third generation settlers in the district are rare. This relatively non-permanent nature of immigration of the Oriya speakers is reflected in the sexwise distribution of persons of this linguistic group. 14,781 or 81 per cent of the Oriya speakers in the district are males and only 3,465 or 19 per cent are females according to the Census of 1961. In 1901 the sex composition was 2,967 males and 58 females. In 1931, there were 9,203 Oriya speakers in the district (of whom only 625 were females) forming about 0.82 per cent of the total district population. In a 60-year period from 1901 to 1961, the Oriya speaking population in the district has grown by as much as 503 per cent. In 1961 they were found to comprise about 5 per cent of the thana population of Bhadreswar. Oriya speakers are also found in the industrialized urban regions of Serampore and Uttarpara police stations.

The Nepali mother tongue group

Nepali, though a language of foreign extraction, has not been classified as such for Census purposes as a large number of Indians of the sub-Himalayan regions are Nepali speakers. According to the Census of 1961, there were altogether 1,036 persons who are immigrants into the district from Nepal. But Nepali speakers in Hooghly number more than twice this figure. It is reasonable, therefore, to suppose that the rest of the Nepali speakers are of Indian origin. In 1961, 2,335 persons, constituting about 0.1 per cent of the district population, declared Nepali as their mother tongue. They are mostly employed in the urban areas of the district as watch-and-ward men in industries and as policemen. During 1951-61 the population of

this linguistic group increased by 354.2 per cent from 492 to 2,335 persons.

Linguistic categorization of mother tongues and statistics of minor mother tongue groups

In the Census of 1961, people belonging to as many as 58 mother tongue groups were located within the district of which 11 were from countries outside the Indian sub-continent. Many of the 58 had insignificant populations and some, like the African, was spoken by a few persons. The 47 mother tongues of Indian origin have been classified for Census purposes into a number of families, sub-families and groups according to the classification followed by Grierson.

In the Aryan sub-family of the Indo-European family as many as 21 languages are found of which Bengali is a major one belonging to the Eastern group. Oriya is another language of this group. Assamese is of minor significance to the district. Malpahari (89 speakers) and Dehari (18 speakers) have been grouped with Bengali while Bhojpuri (11 speakers) and Maithili (70 speakers) are identified with Hindi.

Hindi, Urdu, Hindustani, Punjabi, Rajasthani, Marwari, Bilaspuri or Chattisgarhi (120 speakers) and Nepali belong to what has been defined by Grierson as mediate sub-branch or inner sub-branch of the Aryan sub-family.

There are a few speakers of Sindhi coming under the North-Western group of the Outer sub-branch of the Aryan sub-family and of Marathi (543 speakers) included in the Southern group of the Outer sub-branch of the Aryan sub-family. Kashmiri, belonging to the Dardic sub-family of the Indo-Aryan family of languages, has only 2 speakers in the district.

The Dravidian and the Andhra groups under the Dravidian family of languages are represented by Kanada (43 speakers), Malayalam (616 speakers), Tamil (405 speakers) and Telugu (6,880 speakers). These linguistic groups are mostly non-permanent immigrants into the industrial areas of the district.

The number of speakers belonging to the Tibeto-Chinese family of languages has never exceeded 10 in the district, the only exception being in the case of Mru which falls within the Burma group of the Tibeto-Burmese sub-family of the Tibeto-Chinese family. In 1961 there were 48 Mru speakers in West Bengal of whom 23 lived in Hooghly and the rest in Jalpaiguri district. According to Dalton, "Both Mru and Kheong are used by the Arakanese as generic terms for hill tribes. The people who call themselves Mru are now a small tribe, numbering altogether in Arakan about 2,800 souls . . . , and occupy the hills between Arakan and Chittagong. The Arakanese annals mention this tribe as already in the country . . . and in the fourteenth century one of them was chosen the king of Arakan."[8] Dalton also mentions their being constantly driven westward by other powerful tribes. But how a few managed to reach these remote parts of West Bengal is not known.

To the Austro-Asiatic sub-family of the Austric family belong speakers of a number of languages used mostly by the tribals of the district. Quantitatively, the most important of them pertain to the Munda branch of which Santali is the most significant component so far as this district is concerned. Among other languages of this branch Ho has only 5 speakers (number of persons belonging to the Ho tribe is 37), all living in urban areas. The Kora (Koḍā) language claims 373 speakers although 3,343 persons belong to this tribe. Some Udangmudrias, found in the district, have been classified with the Kora speakers. The Census of 1961 enumerated 324 speakers of Mundari and 6 speakers of unspecified Munda tongues in the district against a total of 880 persons of Munda origin. 65 persons speaking Mahili and 28 persons speaking the Pahari languages have been grouped with the Santali speakers.

Among the non-Indian languages spoken in the district, English led the field in 1961 with 691 speakers of whom 450 were males and 241 females. The English-speaking British, American and Australian nationals, however, totalled only 166 persons leading to the inference that most, if not all, of the remaining 525 persons were of Indian extraction.

The table below gives the generation variations of populations belonging to the three major language groups in the district.

GENERATION VARIATION OF POPULATION IN MAJOR LANGUAGE GROUPS

	1961	1931	1901
Bengali:			
Total population	19,65,397	9,64,105	9,91,057
Percentage variation	+103.8	−2.7	—
Percentage of the total district population	88.1	86.5	94.4
Hindi:			
Total population	1,29,638	90,060	42,928
Percentage variation	+43.9	+109.7	—
Percentage of the total district population	5.8	8.1	4.1
Santali:			
Total population	69,007	35,702	9,061
Percentage variation	+93.2	+294.3	—
Percentage of the total district population	3	3.2	0.86

Bilingualism

Knowledge of a second language other than one's mother tongue, sufficient for simple communication, is known as bilingualism. With the speakers of Indian languages, English as the second language is not only an instrument for adjustment with the prevailing socio-economic situation but also works as a symbol of status and power. On the other hand when Bengali is the second language to a person with another Indian language as the mother tongue, it is merely an instrument for adjustment with the surrounding socio-economic conditions.

Among the Bengali mother tongue group

According to the Census of 1961, 1,10,891 persons or 6.4 per cent of the people of the district having Bengali as their mother tongue know a second language. To 5.6 per cent of such people, English is the other language known; 92,062 persons or 83 per cent of them are males and only 18,829 or 17 per cent are females. 7,641 persons or 0.4 per cent of the Bengali speakers in the district use Hindi as their second language. Of them 5,926 or 77 per cent are males and the rest females. Urdu is the second language of 2,321 persons. The majority of 876 Bengali speakers (519 males and 367 females) who have Santali as their second language are presumably Santals in their ethnic affinities but have preferred to return Bengali as their mother tongue. The same is perhaps true of the 18 persons who have returned Kora and 9 persons who have declared Kurukh/Oraon as their second languages. In fact, Bengali has been accepted as the mother tongue by a number of tribals whose ethnic associations point to distinctly separate mother tongues. In 1961 there were 1,723 persons in the district who ethnically belonged to the Bhumij community but none of them could speak the almost defunct Bhumij language and all have been registered as Bengali speakers. 202 persons (all males) in the Bengali mother tongue group declared French as their second language during the Census of 1961. After nearly two centuries of French rule in Chandernagore, when one of the media of higher education was French, it is surprising to find only 202 persons professing a knowledge of that language.

Bilingualism among the *ādivāsis*

Those of the immigrant tribals like the Santals, Koras, Oraons, Hos and Mundas who have distinctly separate mother tongues of their own, are found to be adept bilinguals. Some tribes, e.g. the Bhumijs have now no separate mother tongue altogether. In 1951 63.1 per cent of the total Santal population of the district numbering 39,219 persons spoke a second language, which, for 99 per cent of the bilingual Santals was Bengali and for the rest some form of Hindi or the other. In 1961 only 39 per cent of the same linguistic group were bilinguals of whom a preponderating majority returned Bengali as their second language but 61 declared Hindi and 21 (20 males and 1 female) declared English as their second language. A 24.1 per cent fall within a decade among the Santali bilinguals is not easily explainable. It may be partly due to the fact that between 1951 and 1961 there had been a very sizeable influx of Santali speakers into the district and many of the new-comers did not know a second language. The numbers of bilingual Santals as enumerated in 1951 and 1961 do not reflect the actual extent of bilingualism among them on another account. It is common knowledge that many people of Santal origin do not declare Santali as their mother tongue; they declare some other language instead—Bengali in most cases—as the medium of their speech. In the Census of 1961, at least 4,681 persons or 6.4 per cent of the Santal population of the district did

not return Santali as their mother tongue.* In order to assess the exact extent of bilingualism amongst this linguistic group, the persons belonging to the tribe who have not returned the usual mother tongue should be taken into account along with other Santali speakers who have returned a second language as a subsidiary tongue.

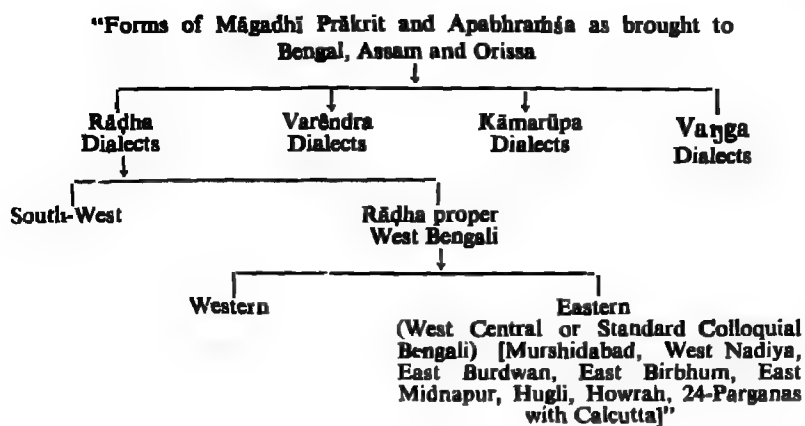
Among the Kora speakers, 287 persons representing 77 per cent of the district population are bilingual. But the extent of bilingualism among them is, in fact, far greater than these figures suggest. Only about 8 per cent of the Koras can speak their own tribal language while the rest are ignorant of it. Most of them speak Bengali as a second language. A large majority of those who do not speak Kora as their mother tongue perhaps know the language and they may be reasonably regarded as bilinguals. Of the Kurukh/Oraon speakers, 36 per cent are bilingual but here again the actual extent of bilingualism would appear to be much greater as most of the 3,743 Oraons in the district have returned Bengali as their mother tongue.

The tribals of the district having separate mother tongues of their own become adept bilinguals for several reasons. More often than not social and economic circumstances compel them to live amidst a Bengali speaking populace thus making the learning of a second language easy. Of late, school-going tribal children are also picking up Bengali very quickly as in most primary schools in the countryside education is imparted through the medium of the Bengali language.

Bengali dialect spoken in the district

According to Grierson, the Bengali spoken in the district belongs to the Western branch of the language and is the Central or Standard form of colloquial Bengali. "The purest and most admired Bengali is spoken in the area marked as Central, and that, perhaps, spoken in the District of Hooghly, near the river of the same name, is the shade with which it is considered the most desirable to be familiar."[10] But the dialect current in a large portion of the Arambagh subdivision, especially in the Goghat police station area, is heavily laden with an influx of intonations from adjacent areas of Midnapur and is, in a sense, somewhat different from the dialect used in the district to the east of the Damodar river. "The Central Dialect of Bengali, as spoken by the educated classes, is that usually taken as the standard of polite conversation. ... It is the language of the town of Calcutta and of the Districts of the Twenty-four-Parganas, Nadia, Murshidabad, Hooghly and Howrah."[11] Its grammatical rules and conventions are those of Bengali Standard Colloquial's.

According to Prof. Sunitikumar Chatterji, "the dialects of Bengali fall into four main classes, agreeing with four ancient divisions of the country: Rāḍha; Puṇḍra or Varēndra; Vaṅga; and Kāmarūpa.[12]

* The total number of Santals in the district, according to the Census of 1961, was 73,781 and the total number of those who declared Santali as their mother tongue was 69,100.

Hooghly district undoubtedly belongs to the region which was once known as southern Rarh. The tract lying between the Bhagirathi, the Damodar, the Bally Khal and the Burdwan district comprises the eastern part of the southern Rarh country, along with Nadia and portions of south Murshidabad.

"The speech of the upper classes in the western part of the Delta and in Eastern Rāḍha gave the literary language to Bengal, and now the educated colloquial of this tract, especially of the cities of Nadiya and Calcutta, has become the standard one for Bengali, having come to the position which educated Southern English now occupies in Great Britain and Ireland.

"The more important points of divergence among the various groups of Bengali are noted here.

"Phonetic: East Rāḍha, the Standard Colloquial, has advanced more than any other dialect in effecting a total change from the common Bengali type by introducing largely the habits of mutation, vowel harmony etc., e.g.: East Rāḍha করে, কোরে (kore), রেখে (rekhe), দিশি (diṣi), বিলিতি (biliti)=typical East Bengali (kòira, raikha, deṣi, bilati), respectively *having done*, *having kept*, *native*, *European*. The stress system in West Central Bengali is predominantly initial, both in words and phrases. This results in dropping of vowels in unstressed medial syllables, and thus in shortening of the forms of words, e.g. West Bengali কষ্টী পাথর (koṣṭi pathor) *touchsotne*=North and North Central Bengali কষ্টী (kɔṣṭi) from Old Bengali (kaṣṭa : ṭi)=Middle Indo-Aryan."[13]

"Morphological: West Rāḍha, (the dialect of Hooghly and neighbouring districts—Ed.) has the common Bengali plural affix গুলা ≪gulā <kula≫ in the form of ≪gul-ā-k≫, East Rāḍha as ≪guno≫. The post-positions are numerous and each group shows its special predilections: e.g., Rāḍha would prefer সঙ্গে ≪sàṅgē≫ meaning *with*, but Vaṅga সাথে ≪sāthē≫. In conjugation, the past first person affix ≪-(i) lum, -lū̃, -ilō̃≫ is

*found in Rāḍha . . . : the Vaŋga form ≪-itām≫ has been adopted in the 'Sādhu-bhāṣā'; and ≪-itām>-item≫ has been super-imposed on most dialects, including even the West Central (i.e. Standard Colloquial) Dialect. In the formation of the compound tenses, the progressive tenses show difference in Rāḍha and Varêndra on one hand, and in Vaŋga on the other: the latter formed it with the present participle in ≪-itē≫ + the verb substantive, whereas in the former, it seems to be made, not with the ≪-itē≫ participle, but with a different verbal form + the verb substantive: e.g., literary Bengali চলিতেছে (in prose) ≪cålitē-chē≫, চলিছে (in poetry only) ≪cåli-chē≫, both meaning *is walking*=Rāḍha dialects, South-West Bengali, West Rāḍha, and East Rāḍha, respectively (ċ͡ʒol-ṭhe, ċ͡ʒɔl-ċ͡ʒhe, ċ͡ʒol-ċ͡ʒe), Varêndra (ċ͡ʒɔl-se), which are forms without ≪-ite≫."[14]

"Dialectal sounds of New Bengali: The more important sound of dialectal Bengali may be noted: (ɛ) -half open front vowel, intermediate between (e) and (æ) of Standard Bengali, is found in the East Bengali dialects, as well as in the Bengali of the extreme west."[15]

"Dipthongisation from Epenthesis: Middle Bengali ≪āŭ, āŭ > āĭ≫ is found as ≪ āu, āi ≫ when occuring finally in New Bengali, and it is contracted to ≪ā≫ in West Central Bengali, when closed by a consonant, e.g. লাউ ≪lāu≫(alābu), আই ≪āi≫ (āu, āyuṣ). ≪āi, āu>āi≫ in the body of a word extended by an affix is found as ≪ē≫ in West Central Bengali, e.g. *in forms like* মেসো ≪mēsō≫ *husband of mother's sister*, New Bengali মাউস্‌আ, মাইস্‌আ, ≪māusuā> māisuā≫, from মাউসী ≪māusī≫ = New Bengali মাসী ≪māsī≫(māt̥r-ṣvas̥r-). It seems that in West Central Bengali, especially round about Calcutta, Hugli, etc., just as in the Late Medieval Bengali, the normal change of Middle Bengali ≪āi≫, as well as of ≪āi <āu≫, when this ≪āi≫ was not final (i.e., when it was closed by a consonant or was in the middle of the word), was to an ≪ē≫. This is closely connected with umlaut in this dialect. But influence of other dialects, and especially of the literary language, prevented a wholesale contraction of ≪āi≫ to ≪ē≫, in the speech of the upper classes at least. Thus we have পেলে ≪pēlē≫ *obtained*, খেলে ≪khēlē≫ *ate*, এলুম also এলাম ≪ēlum, ēlām≫ *I came*, এলো ≪ēlō≫ *he came*, also এলো ≪ēlo≫ *dishevelled* etc. (respectively=Literary Bengali পাইল ≪pāilå≫, খাইল ≪khāilå≫, আইলাম or better আসিলাম ≪ailām > āsilām≫, আইল or better আসিল ≪āilå > āsilå≫ and Medieval Bengali আইলা, আউলা ≪āilā, āulā≫ : these have become the accepted forms in the colloquial when it is used in writing. If we have চার ≪cār≫ *four* < চাইর ≪cāir≫, রাত ≪rāt≫ *night* < রাইত ≪rāit≫ etc., as the ordinary forms in West Central Bengali,—in the genitive, or instrumental-locative, with the এর ≪-ēr≫ and এ ≪-ē≫ affixes respectively, the ≪ā≫ in these words is changed to ≪ē≫: e.g., রেতের পাড়

≪ cērēr pāc ≫ *4/5ths;* রেতের বেলা ≪ rētēr bēlā ≫ *night time* etc. In the speech of the lower classes in the West Central Bengali area, the ≪ ē ≫ forms have greater vogue. Thus we hear এসে ≪ ēsē ≫ *comes*, for the educated আসে ≪ āsē ≫ = Medieval Bengali আইসে ≪ āisē ≫ (āviśati)."[16]

"Mutation without Epenthesis: The system of altering between high and low vowels of the same class through influence of following ones is a remarkable thing in New Bengali phonology, especially in West Central Bengali: e.g., (e) with (a, e, o) in next syllable is lowered to (æ): দেখে ≪ dēkhē ≫ *he sees* is pronounced (dækhe), but দেখিয়া > দেখে ≪ dēkhiā > dēkhē ≫ *having seen* is (dekhe), the influence of the (i) preventing a lowering of (e) to (æ)."[17]

"New Bengali Dialectal Forms for the First Person: East Rāḍha (Standard Colloquial) also Varēndra (North Central):

Nominative	আমি āmi		আমরা āmrā
Genitive	আমার āmār		আমাদের āmā-dēr
Dative	আমাকে āmā-kē,		আমায় āmā-y > āmā-ē,
	আমাদের āmā-dēr,		আমাদিগকে āmā-diga-kē
Locative	আমায় āmā-y,		আমাতে āmā-tē,
	আমাদিগেতে āmā-digē-tē		আমাদেরতে āmā-dēr-tē

etc."[18]

Santali dialects spoken in the district

"Santāli", according to Grierson, "is a remarkably uniform language. There are only two dialects, and even these do not differ much from the standard form of speech. They are the so-called Kārmālī, spoken by the Kâlhā tribe in the Sonthal Parganas, Manbhum and Hazaribagh, and the dialect of the Māhlēs in the central and southern portion of the Sonthal Parganas and the adjoining parts of Birbhum and Manbhum . . . .

"Santālī has, to some extent, been influenced by the neighbouring Aryan languages. This influence is, however, mainly confined to the vocabulary, though we can also see how Aryan suffixes and Aryan syntax are beginning to make themselves felt, and some of the most usual postpositions are perhaps Aryan. Broadly speaking, however, the structure and the general character of the language has remained unchanged.

"Bihārī is the Aryan language which has most largely influenced Santālī. In the east the language has now begun to come under the spell of Bengali, and in the south the influence of Oṛiyā is traceable. The different sources from which words have been borrowed influence to some extent the form in which they are adopted. Thus the short *a* is retained in words borrowed from Bihārī, but is pronounced as an *ā* in cases where the loan has been made from Bengali. In this way, a slight difference is produced in the Santālī of the Bengali districts and that spoken in places where Bihārī is the principal Aryan language. The influence of Bengali is of a relatively modern

date. On the other hand, it has of late years been gradually spreading."[19]

In the 60-year period, since Grierson studied the characteristics of Santali dialects, the tendencies observed by him have been growing rapidly and changing the character of Santali dialects in different regions. Even the purest form of Santali spoken in the Santal Parganas of Bihar is not free now from the inroads of Hindi. Santali spoken in Mayurbhanj and north Balasore (Baleswar) in Orissa is, similarly, a dialect distinct from the one spoken in the Santal Parganas because of the influences imbibed from Oriya. The language, as spoken in predominantly Bengali speaking districts of West Bengal, is, again, not one and the same. For instance, the dialect used in Midnapur is akin to that in vogue in Orissa while the dialect current in Birbhum is close to that of the Santal Parganas. Santali speakers of the Hooghly district, as we have already seen, live surrounded by Bengalis. Due to economic and social compulsions, they have to come in frequent contact with Bengali speakers. This has brought them—both culturally and linguistically—in close touch with the neighbouring Bengalis.

RELIGION AND CASTE

Religion

SUBDIVISION & THANAWISE DISTRIBUTION OF PERSONS BELONGING TO MAJOR RELIGIOUS COMMUNITIES IN HOOGHLY DISTRICT: 1961

District/ Subdivision/ Police Stn.	Hinduism		Islam		Christianity	
	Persons	Percentage of total	Persons	Percentage of total	Persons	Percentage of total
HOOGHLY DISTRICT	19,43,698	87.1	2,82,413	12.7	3,216	0.1
Sadar Subdivision	5,75,046	86.8	85,625	12.9	705	0.1
Chinsura	1,01,062	93.8	5,884	5.5	447	0.4
Polba	95,196	83.3	19,032	16.7	2	—
Dhaniakhali	1,18,094	85.9	19,402	14.1	1	—
Pandua	98,918	80.2	24,351	19.7	16	—
Balagarh	89,067	92.0	7,705	7.9	15	—
Magra	72,709	88.2	9,251	11.2	224	0.2
Chandernagore Subdivision	4,30,744	88.3	55,538	11.4	1,613	0.03
Chandernagore	63,497	94.6	3,190	4.7	379	0.5
Bhadreswar	76,452	79.8	18.020	18.8	1,212	1.5
Singur	1,19,236	92.7	9,317	7.3	21	—
Haripal	92,864	83.0	18,959	16.9	—	—
Tarakeswar	78,695	92.8	6,052	7.1	1	—
Serampore Subdivision	4,97,293	86.7	56,336	12.9	885	0.1
Serampore	1,77,095	89.7	18,653	9.4	758	0.4
Uttarpara	1,09,069	97.3	2,636	2.3	116	—
Chanditala	1,31,011	78.5	35,862	21.5	11	—
Jangipara	80,118	82.6	16,822	17.4	—	—
Arambagh Subdivision	4,40,615	86.7	67,277	13.2	13	—
Goghat	1,13,725	91.3	10,785	8.7	1	—
Arambagh	1,11,893	84.3	20,830	15.7	12	—
Khanakul	1,50,203	84.9	26,571	15.0	—	—
Pursura	64,794	87.7	9,091	12.3	—	—

Hinduism

According to the Census of 1961, 19,43,698 persons, or 87.1 per cent of the total district population were Hindus. In 1901, in a population of 10,49,282, 8,61,116 persons, or 82 per cent, professed the same faith. In 1931, 9,24,061 among 11,14,255 persons, forming 82.9 per cent of the district population, were within the Hindu fold. In the 30-year period from 1901 to 1931, there was an increase of 7.3 per cent over the Hindu population in 1901 but the proportion of Hindus to the total populations of the respective years remained more or less the same, with only a paltry excess of 0.9 per cent in 1931. During the next 30 years from 1931 to 1961 the Hindu population of the district increased by 110.3 per cent or 36.8 per cent per decade The corresponding rate of growth of the general population of the district had been 95.4 per cent or 31.8 per cent per decade. But the ratio of Hindus to the general population was not seriously disturbed as a result. The ratio of Hindus to the total district population rose from 82.9 per cent in 1931 to 87.1 per cent in 1961. But in the decade from 1951 to 1961, the Hindu population of the district rose by 39.5 per cent (from 13,45,334 to 19,43,698 persons). Therefore, their growth during the two preceding decades was, on an average, at the rate of 35.35 per cent per decade. One probable reason for this increase may be the sizeable conversion of believers in tribal religions to Hinduism. But this can, at best, explain the issue only partially. All through the 20th century the tribals of the district have shown a preference for regarding themselves as Hindus retaining at the same time their belief in the traditional cults and rituals. Only a microscopic minority—0.2 per cent of the tribal population—declared their faith in the tribal and animistic religions during the Census of 1931. In 1961 the total number of those persons in the district who were not Hindus, Muslims, Christians, Sikhs, Jains, Buddhists, Brahmos and Zoroastrians was only 17. It would thus appear that the conversion of the tribals to Hinduism has had little bearing on the rate of growth of the Hindu populace of the district. Secondly, among the persons who have migrated into the district from North India, Hindus have always been numerically superior. So, this influx does not seem to offer a plausible explanation either. A more well-founded reason is, therefore, to be had in the partition of the country which drove countless Hindu refugees from East Pakistan into the Hooghly district. And this phenomenon has mainly contributed to the growth of the Hindu population of the district during the decade 1951-61.

In no police station of Hooghly, Hindus constitute less than 78 per cent of the thana population. The percentage is lowest in Chanditala P.S. with 78.5% and highest in Uttarpara P.S. with 97.3%. It is interesting to note that ever since 1872 the percentage of Hindus to the total population of the district has not shown any significant change.

Major sects and cults

With the exception of certain castes and the majority of those who profess the Gauriya Vaishnava Bhakti cult including some families associated with Chaitanya Vaishnavism as also a number of families devoted to Sakti and Siva worship, especially with tantrist rites, the sect allegiance of the common Bengalis in the eastern part of the Rarh region is far from very clear. Relatively well-off cultivators in the rural areas, mostly drawn from the so-called upper Hindu castes, traders and businessmen from the Nabasakha castes, absentee landlords and white-collar workers of urban areas are often found to have family deities which are worshipped daily. It may be tempting to conclude about the sectarian devotion of a group from its family deities but it would be wrong to do so on two grounds. First, with the economically well-off people belonging to upper Hindu castes, such as the landed gentry in rural areas, and the educated middle and upper-middle classes in the urban areas, loyalty to cults is dependant on personal preferences rather than on ritualistic compulsions. Members of the same family are often found to worship divinities of varying cults. Secondly, in many family shrines a collection of many deities is the usual sight. Broadly speaking, Bengali Hindus believe in the supremacy of a number of major godheads of the Brahminical Hindu religion together with a few cultheads which have come to be included in the Hindu pantheon. Although the precise religious loyalty of the majority of Bengali Hindus, apart from those mentioned earlier, is not easy to determine, it is perhaps not too difficult to particularize the different sects and cults to be found in Hooghly district from the occurrences of certain festivals and the popularity of some of the divinities.

Ganapati or Ganesa as a major culthead and the *Gānapatya* sect

There is no Ganesa cult or *Gānapatya* sect as such among the Bengali Hindus of the district as is found in Maharastra and Gujarat. It will be highly conjectural to say whether this cult flourished in Hooghly in the past. It is, however, interesting to note that there is a Ganesa figure, in a highly abraded form, in the north-western corner of the backwall of the Baisdarwaja Mosque at Pandua. This figure, as well as other despoiled members of older Hindu edifices, which have gone into the construction of the mosques and monuments of Pandua, are apparently remains of the Pala period. Modern Bengali Hindus invoke Ganesa as the initial act in the worship of all major Puranic gods and goddesses. Ganesa's blessings are also sought at the start of a new commercial venture, for he is believed to be the bestower of all success. Traders often keep images of Ganesa at their seats of business and perform daily service of the deity for which, however, no Brahmin priest is usually employed. There is no temple of Ganesa worth the name nor are there any special festivals held in his honour in the district.

Surya or Sun as a major culthead and the *Saurya* sect

Among the Bengali Hindus of the district one hardly comes across any awareness of Surya or the Sun as a major Vedic and Puranic

god, whose worshippers, known as the *Surya-upāsakas*, are found in other parts of India. Surya was perhaps not so neglected a deity in the late ancient and early medieval Hooghly. A number of stone images of the sun-god has been unearthed from the north-eastern part of the district, most of which are of the Pala and Sena periods. They include a beautifully carved image in black stone flanked by Danda, Surena, Usha and Pingala, standing on a chariot drawn by seven horses driven by Aruna. This 11th century image was found a few years ago at the site of the Bandel Thermal Power Station. Another image of the sun-god in black basalt and of a similar style of sculpture is still worshipped as a secondary deity in the temple of Ghanteswar Siva in the village of Khanakul in the police station of that name. So far as Surya worship is concerned, it is now limited to certain rituals followed by some Brahmins. Devout Brahmins, especially of priestly vocation, and those in the habit of worshipping a family deity daily, invoke the sun-god after their morning ablutions, particularly when the bath is taken in the Bhagirathi. This ritual of invoking Surya is more common among the Brahmins of North India residing in this district than among the local Brahmins. There is no *Saurya* sect as such among the modern Hindus of the district.

Cult of Dharma

The cult of Dharma is mainly a local cult of the Rarh region of West Bengal. From the frequency of occurrence of his festival of Gajan, and the multiplicity of the seats of Dharma worship, it appears that south Birbhum, West Burdwan, Bankura and north Midnapur form the cradle of the cult. In the Arambagh subdivision, which is in immediate proximity of this region, Dharma worship flourished at Goghat in the police station of the same name, at Sonatikri in Khanakul P.S. and at Dihi-Bayera, Salehpur, Senhat and Gaurhati in Arambagh thana. In the Sadar subdivision, which is rather away from the main locale of the cult, the festivals of Dharma held at Mundukhola for three consecutive days and at Tildanga (both in Balagarh P.S.) for a day, in the Bengali month of Magh (January-February) draw numerous devotees, mostly belonging to the so-called lower and untouchable castes.

There is no sect of Dharma worshippers as such but Bagdis, Hanris, Doms and people of lower castes and the untouchables are usually the more active devotees of this deity. Brahmin priests are rarely employed for the worship of Dharma. *Patit* or declassed Brahmins serve as priest in the centres of Dharma worship in the Sadar subdivision but in Arambagh the priest of Sitalnarayan of Gaurhati is a Bagdi, of Swarupnarayan of Sonatikri a Dom, of the Dharma of Senhat a Hanri and of the Dharma at Salehpur a Dom with the traditional priestly title of Pandit.

Dharma, as is well known, is not a Vedic or a Puranic divinity. But with the employment of Brahmins, mostly of the declassed order,

for Dharma worship, especially in the Sadar subdivision of Hooghly district, more and more Brahminical rites have come to be incorporated in the rituals than what is found in Birbhum, Bankura, West Burdwan or North Midnapur. Brahmin and upper caste Hindus have also shown a tendency to integrate the cult of Dharma with the more respectable Brahminical worship of Siva, Vishnu and Surya by attributing to the former certain powers and functions usually associated with these Vedic and Puranic divinities. Often the similarity of the rituals connected with the Gajan festival of Dharma and the Gajan festival of Siva is stressed to show the essential unity of the two godheads. Dharma of Gaurhati has two Saktis or female principles, just as is found in Sivaite tantra. Both these Saktis, again, are known as Kamikshya, a name which is obviously borrowed from that of the well-known Sakta divinity Kamakshya of Kamrupa (Assam).

In the spread of the Dharma cult, the forces of religious integration have worked at two levels. At the upper level, the Brahminical castes have, to some extent, accepted this non-Vedic and non-Puranic form of worship and have permitted, at places, the services of Brahmin priests, the liberality being prompted as much by religious toleration as the more mundane consideration of bringing alien communities closer to the Hindu fold. At the lower level, the original backward-class devotees of Dharma have consistently tried to stress the points of conceptual unity of their divinities with known Brahminical deities for enhancing the status and prestige of their own cults. As can only be expected, the resultant integration is marked with significant local variations. The Brâhmin devotees of Dharma, for instance, who send edible offerings for the propitiation of the deity at Senhat, take the food although it has been touched by a Hanri priest; they would shudder to eat food from the same Hanri once he is out of the temple. At Mundukhola the day-to-day service of Dharma is performed by a priest of an untouchable caste, but special service on the occasion of the annual festival of the deity is performed by a Brahmin.

The Gauriya Vaishnava Bhakti-dharma of Sri Chaitanya also played its part in this process of religious integration. Since Chaitanya's own times (A.D. 1486-1534), the Vaishnava cult began spreading in the district of Hooghly through the endeavours of disciples like Raghunath Das, Uddharan Datta, Abhiram Goswami and others. Vaishnava influence on the Dharma cult, at least in this district, appears to have been fairly extensive. It is not only limited to the addition of the suffix 'narayan' to the names of such Dharma deities as Swarupnarayan and Sitalnarayan but goes further. The Dharma of Salepur visits his aunt during his annual car festival and stays there for some time before returning, just as what the popular Hindu god Jagannath does. Festivals like the Snanjatra, Ras, Dol

and Jhulan associated with Radhika and Krishna of the Vaishnava Bhakti cult, are also celebrated for certain Dharma deities of the district.

Late Pandit Haraprasad Sastri identified Dharma with Buddha on a linguistic analogy since in the *Amarkosh*, an early Buddhist text, Buddha has been referred to as Dharmaraj.[20] Prof. Suniti Kumar Chatterji finds an identification of Dharma with *kurma* (tortoise) as the term 'dharma', in his opinion, is derived from a word denoting a tortoise in one of the languages of the Austric Family.[21] Some other scholars have emphasized the supposed tortoiselike shape of the stone image of Dharma to prove an affinity between Dharma and the tortoise, the latter being an incarnation of Vishnu and a vehicle of the aquatic goddess Yamuna.[22] Other researchers have identified Dharma with Surya or the sun-god of the Vedas.[23] As regards the attributed powers and functions, there is a remarkable similarity between the two deities. The suggestive meanings of the rituals connected with both forms of worship also point to certain affinities. An overall assessment that the Dharma cult is but a regional version of ancient sun worship may not, therefore, be without a reasonable basis.

Folkish forms of sun worship

Typical Bengali festivals like Makar-Samkranti, held on the last day of the Bengali month of Poush (January-February) and Baruni-Snan, held on the last day of the Bengali month of Chaitra (March-April), though connected with the worship of the sun, can in no way be associated with the Vedic or Brahminical forms of sun worship. The powers and functions of the sun as a cosmic phenomenon, which came to be eulogized in the Vedic hymns and by the sages of the Puranas, have inspired through the ages the agricultural people beyond the pale of Brahminical culture to arrive at their own forms of worship associated more directly with the fertilizing aspect of solar radiation.

Makar-Samkranti is usually held in the neighbourhood of rivers and was once very much in vogue in the families of seamen and navigators. This festival, attended by fairs, is held in the village Dhulepur in Goghat P.S. and at Tribeni in Magra police station. It is interesting to note that during Makar-Samkranti a special festival is held in honour of the Dharma deity at Sonatikri. Fairs are held on the occasion of Baruni-Snan at Chatra in Serampore P.S., Dihi Bayera in Arambagh thana and Marakhana in Khanakul police station.

Sakti cult and Sakta sect

Sakti worship or the cult of adoring the female or the mother principle is a major cult of the Rarh region. In the absence of a clear-cut religious demarcation, it is difficult to say whether the Sakti cult or the Vaishnava Bhakti cult attracts a larger following. The central theme of the Sakti cult is the female principle's association with a male principle. Female divinities having a male consort

or Bhairab and endowed with creative powers are generally conceived as Sakti. In Brahminical Hindu religion Sakti is conceived as the divine mother and the female counterpart of Siva the supreme creator. But among the common people, Sakti is often the presiding deity of fertility cults of folkish origin. The similarity of the conception of a divine mother associated with a male counterpart no doubt provided a platform for the religious integration of the high and low castes in local society. But the process is far from complete. Thus while Ganga, worshipped on the Dasahara day at Mandalai village in Pandua P.S., has remained a goddess of the untouchable castes like the Kaibartas, Malos and the like, Manasa, another divinity of non-Brahminical origin, is worshipped irrespective of caste affiliations in Pandua, Pursura and Arambagh police stations.

Kali, as a *manifestation* of Sakti

Kali is the most widely worshipped deity among the different manifestations of Sakti and the Khanakul police station area in the Arambagh subdivision appears to be her stronghold in the district. Iconographically, images of this divinity vary considerably. In many places she is worshipped in the form of a *yoni* or female organ. Elsewhere, as in the temple of Krishnananda Agambagis at Radhanagar in Khanakul P.S., she sits on a lotus sprouting from the navel of Kala Bhairab lying prostrate on Siva. With her tongue jutting out, the deity, in this form, is a combination of Kali and Tripurasundari, another manifestation of Sakti. The more well-known images of Hamseswari at Bansberia and of Ananda Bhairabi at Somra-Sukharia (Balagarh P.S.) are also seated on lotuses stemming from the navels of their consorts.

The special adoration of Kali on the occasion of the new moon day of the Bengali month of Karttik (October-November) is one of the popular festivals of West Bengal. It coincides with Diwali in North India and is similarly attended with display of fireworks. But peculiarly at Bàkulia in Balagarh P.S., Kaparpur in Jangipara P.S. and Jagatpur in Goghat P.S. the annual festival of Kali is held in the Bengali month of Poush (December-January) and that of Smasan Kali of Garulia Bhatsala in Goghat P.S. is held in the Bengali month of Baisakh (April-May) when fairs are also held.

According to Toynbee, "The history of crime in the Hooghly district between 1795 and 1845 is practically a history of dacoity. Other crimes were of course committed, but their magnitude was not so great."[34] Hindu robbers were mostly devout worshippers of Kali and invoked her blessings before setting out on their exploits. A number of Kali shrines in the district is associated with these dacoits of bygone days, the deities in them being known as *Dākāte* or robbers' Kali. Divinities of this description are still to be found at Televeler Math in Arambagh P.S., Bhikdaser Math in Goghat P.S., Kurigachhi in Jangipara P.S., Kaligarh in Balagarh P.S. and near the village of Singur in the police station of that name. The

fame of *Pāglā* (lit. mad) Kali of Tirol, not far from Arambagh, rests on the belief that she is endowed with the power of curing insanity and other mental disorders.

Manasa

Next in point of importance among the manifestations of Sakti in Hooghly district is Manasa or Bishahari, conceived as the goddess of serpents. Her image, when placed inside a temple, shows her in female form with snakes coiled around her neck, head and hands. But when her pedestal is in the open or under a tree, a twig of the *seej* tree represents her presence. From this combination of serpent and plant in the conception of Manasa, some scholars conclude[25] that originally she belonged to a fertility cult, for among some tribes serpents and plants are symbols of fertility. Even to this day Manasa is a much more popular goddess amongst the so-called untouchable castes than among the upper strata of Hindu society. Except on special occasions like the annual festival of the deity, Brahmin priests do not officiate in her worship which is left to lower-caste priests called *deyāsis*. On the occasion of Jhanpan, held in connexion with the annual festival of Manasa in Polba and at Inchura in Balagarh P.S., those who undergo voluntary physical penance come mostly from such untouchable castes as Dom, Hanri, Bauri, Bagdi, Kaibarta, Malo etc. The scholars who regard Manasa as primarily a fertility cult deity also point to the fact that in the early Purānas steeped in the Brahminical tradition of North India there is no mention of a female deity associated with snakes and that Nagaraj Vasuki, a male god, is mentioned there as the lord of the serpent kingdom. The *purānas* which name a female serpent goddess, namely the *Padma-purāna*, *Devi-bhāgabata* and *Brahmavaivarta-purāna*, are all of dates later than the 12th century A.D. by which time Manasa of non-Brahminical origin had probably gained admittance into the Brahminical pantheon of eastern India.

Some scholars, however, think that Manasa or Bishahari is conceptually derived from Devi Janguli Tara of the Mahayani Buddhist pantheon.[26] It is true that many deities of the common people of eastern India found their way in more or less metamorphosed forms into the Mahayani Buddhist pantheon between the 9th and the 11th centuries when tantrist rituals and beliefs dominated the Buddhist religious practices in Bengal under the Pala kings. The same process of assimilation might have also worked in the case of Manasa. But in the late medieval *Manasā Mangal Kāvyas*, which are popular ballads sung in honour of Manasa, she has been described as the daughter of Siva. Popular belief also associates her with the legend of the sage Jaratkaru in the *Mahābhārata* thus raising her status further in the Brahminical pantheon.

The most important annual festivals of Manasa are held in the district at Polba, Inchura (Balagarh P.S.) and Debipur (Balagarh P.S.) in the Bengali month of Sravan (July-August), at Hoera (Magra

P.S.) in the month of Bhadra (August-September), at Dakshin Rasulpur (Arambagh P.S.) in Asharh (June-July), at Noapara (Haripal P.S.) in the month of Jyaishtha (May-June), at Kodalia (Chinsura P.S.) in Jyaishtha or Asharh (May-July) and again on the last day of Bhadra (September). Though the annual festivals of most of the important Manasas of the district are observed during the rainy and summer months, it may not be correct to say that they are not held in other seasons when cases of snake-bites are relatively rare. For instance, the annual puja of Manasa in the village of Seapur in Dhaniakhali P.S. is held in the Bengali month of Aswin, corresponding to September-October. Fairs are also held on the occasion of many of the festivals mentioned above.

Bisalakshi, another manifestation of Sakti

Bisalakshi, another Sakta goddess, is widely revered in Hooghly district. In the *Sunya-purāna* of Ramai Pandit, Devi Bisalakshi is described as a young virgin in the morning, a pleasant-eyed but huge-proportioned middle-aged woman in the afternoon and an old *yogini* (female ascetic) wearing a garland of human heads at night. She is the mother of the universe and is fond of devil's flesh. Some scholars[27] are not in favour of differentiating her from Basuli, another manifestation of Sakti and wife of Siva.* But this identification has been criticized by other scholars.[28] In Hooghly the cult of Basuli is, however, of very minor importance and no Bisalakshi of the district is identified with her.

The description of Bisalakshi as given in the *Sunya-purāna* hardly corresponds with the images of this deity worshipped at various places in the district. In the village of Anur in Goghat P.S., a lump of earth is supposed to represent her. The Bisalakshi of Dasghara in Dhaniakhali P.S. can in no way be differentiated iconographically from Durga with ten arms. The same goddess of Sinet in Polba P.S. is a female figure of ample proportions with conch-shell bangles on one hand and a tumbler containing bathing oil in the other. The Bisalakshi at Haripal is popularly known as Chandalkanya (the daughter of an untouchable) Bisalakshi. The deity worshipped at Parul in Arambagh P.S. is a spongy stone. The most important Bisalakshi of the district is to be found at Seakhala in Chanditala P.S. whose annual puja is held in the Bengali month of Aswin (September-October) and the annual Jat festival in Asharh (June-July) when big fairs are also held. The Bisalakshis of Hijali in Jangipara P.S. and of Purusottampur in Singur P.S. (represented by a piece of stone) also command wide reverence.

From the icons of Bisalakshi in worship in the district it may not be unreasonable to trace her origin in some non-Brahminical mother cult with the attributes of Parvati and Durga assigned to her in

* This association of Siva with Basuli is found in the *Dharmamangal* of Ghanaram Chakravarti. But the Purānas never identify Basuli with Parvati, the wife of Siva.

course of time. Bisalakshis may not be associated with Bhairabs although many of them have such male consorts.

Chandi, a Sakta deity

Following S. C. Roy's[29] discovery of a mother goddess with destructive power over animals, Asutosh Bhattacharyya[30] thinks that Chandi in her origin was a non-Aryan divinity. The absence of her name in earlier Sanskrit texts, popularity of the goddess among people living beyond the pale of sophisticated Brahminical culture, emphasis on her awe-inspiring mystic powers of destruction rather than on benign aspects of creation and preservation, and the non-homogeneity of conception about her iconography etc. have also been cited by him as pointing to the same conclusion. Whatever might have been the origin of the cult, in the late medieval *Chandimangal Kāvyas* she has always been described as the kinetic principle of the creator of the cosmos, Siva, who is regarded as the static principle.[31]

When we examine the cult of Chandi as practised in the district of Hooghly, we are led to the tentative conclusion that Chandi is a generic name given to several goddesses who share no identical conception about their supposed powers and functions and this disunity persists in their iconographic forms too. In Hooghly, the name Chandi is often prefixed by such appellations as Borai, Olai, Kulai, Onchai, Rana, Garh, Jot, Mangal etc. "The critical eye will see that they are not merely names, but indicate different goddesses who owed their conception to different historical conditions but who were afterwards identified with the one goddess by the usual mental habit of the Hindus."[32] Majority of the Chandis worshipped in the district are village deities with their modest shrines located under shady trees. Either the whole village or a particular caste or some castes of the same order share the responsibility of management of the affairs of the deity. The devotees do not generally take the help of professional priests for the day-to-day services but on special occasions they employ Brahmins or low-caste priests. Most of these deities have no representative form; installed stones serve to represent the divinities.

Of the more influential Chandis housed in temples, Boraichandi of Chandernagore is the most famous. Originally, just a stone, her image now is that of a deity with four arms and riding a *makara*. Her consort is a phallic emblem of Siva. On the last day of the Bengali year synchronising with the Gajan festival of Siva, a ceremony called the Patbhanga Utsav, is held in her honour. At Dakshin Mogalpur in Dhaniakhali P.S., the goddess is known as Jaychandi while at Tarakeswar Onchaichandi is held in high esteem for her supposed powers of curing difficult diseases. In the village of Jot Chandi (Goghat P.S.), which takes its name after the famous deity of the place, the annual festival is held on the last day of the Bengali month of Chaitra (April) and is known as the Gajan festival. At

Purva Govindapur in Jangipara P.S., an evidently Vaishnava temple dedicated to Sridhara houses a Chandi as an ancillary deity. Such co-existence of divinities of different sects can be found all over the district. Legend has it that the name Chanditala (headquarters of the police station of the same name) springs from that of the Chandi believed to have been originally worshipped there by the mythical Srimanta Sadagar of the *Chandimaṅgal Kāvyas*.

Jagaddhatri

Iconographically, Jagaddhatri (lit. the foster-mother of the universe) is very similar to four-armed Durga, the only difference being that she sits on a lion in the *pratyālirha* pose instead of standing on it and she is never represented in the posture of killing a demon. Undoubtedly, she is a manifestation of the kinetic energy of Siva, her male counterpart. In the Bengali month of Agrahayana (November-December), Jagaddhatri's annual festival is celebrated for four consecutive days in the town of Chandernagore amidst great pomp and splendour which is perhaps the biggest religious ceremony of the district.*

Other manifestations of Sakti

Though the temple of Ananda Bhairabi at Somra in Balagarh P.S. dates from early 19th century, the tradition of the cult seems to be more ancient. Iconographically and conceptually, she has some resemblance with Kali. The famous Hamseswari of Bansberia too shows similar affinities with Kali and Tripurasundari but conceptually she is closer to Mahavidya in being regarded as the divinity of supreme knowledge. A temple dedicated to Mahavidya exists at Somra. Another analogous deity is Bagdevi (not to be confused with Saraswati) in worship at the village Ilchhoba in Pandua P.S. She has no image and her annual festival, held on the full moon day in the month of Baisakh (April-May), is known as the Jhanpan Utsav. Goats are sacrificed on the occasion. Savitri Devi of Bhandarhati in Dhaniakhali P.S. is a piece of Pala sculpture with four hands and in a warring pose. In the village of Alati in Pursura P.S. a fair is held in connexion with the annual festival of another Savitri deity in the Bengali month of Poush (December-January). On the occasion of Dasahara in the Bengali month of Jyaisthha (May-June), a divinity named Ganga (not to be identified with the river-goddess) is worshipped at the village Ilchhoba in Pandua P.S. by people of the untouchable castes with the accompaniment of goat sacrifice, burning of fireworks and drinking. Simhabahini, another manifestation of Sakti and iconographically similar to ten-armed Durga, is a well-known goddess of the village of Birlok in Khanakul P.S.

Influence of *tantra*

It appears that Sakti worship has been influenced to a great extent by tantrist beliefs and practices. *Tantra* has been a major force in bringing cults of non-Brahminical origin within the fold of Brahminical Hindu culture of the Rarh region. Because of its similarity of

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* For a detailed description of the celebration, see the entry 'Chandernagore' in the chapter on Places of Interest.

approach in regard to the conception and propitiation of divinities, it has been able to integrate many a folkish cult into the wider sphere of Brahminical Hinduism. Although all the manifestations of Sakti, described above, bear traces of tantrist influence, some of them reflect the relationship more markedly than the others. Ananda Bhairavi of Somra, Tripureswari-Kali of Khanakul-Radhanagar and Hamseswari of Bansberia are instances in point.

A significant turn to Sakti worship was given by Sri Ramakrishna Paramhamsadeva (born in 1833 at Kamarpukur in Goghat P.S. and died in 1886) to whom Kali was essentially a loving and benign mother of the universe and not the primordial power to be worshipped with awe and reverence. Other devotees of his time, notably Kamalakanta Bhattacharya and Ramprasad Sen, also advocated the same approach to the goddess through filial piety. Indeed, in more recent times, the worship of Kali in Bengal has been powerfully tinged with such kindly and humane sentiments than the austere, esoteric practices of the earlier *tantras*.[33] Whether this may be construed as an influence of the Gauriya Vaishnava Bhakti cult on the cult of Sakti is a debatable matter, but conceptual similarities of the two approaches would appear to be striking.

The cult of Siva

Siva, the creator, is in a static, poised and balanced state; Rudra, the destroyer, exhibits the aspect of dynamic flux, and Siva, the *yogi*, is in a mood of calm meditation—these are the three main conceptions of this divinity in the Brahminical *purānas*. Only in a very extended sense are these Puranic concepts meaningful in the context of Siva worship in Bengal. In the mediaeval *Sivāyan Kāvyas*, or long adulatory poems in honour of Siva, he is depicted as a benign god who has the power of endowing the earth with fertility. In the *Manasā*, *Chandi* and *Annadā-Mangal Kāvyas*, which extol the supremacy of the female principle over the male, Siva is represented either as a reluctant peasant or as an inefficient head of a large household. Traces of the Puranic concepts of Siva as the creator or the *yogi* can be discerned in the above types while as Mahakal or Bhairab, distant affinities with Rudra seem to be manifest. Iconographically, all these varying aspects of the deity are not reflected in its image, as everywhere in the district Siva is represented by the *linga* or the phallic symbol. As a result, the deity is accepted as an embodiment of the varying conceptual attributes at different places. Even the more famous Sivas of the district like Taraknath of Tarakeswar, Shandeswar of Chinsura and Jateswarnath of Mahanad are no exceptions to this rule. An interesting iconographic adaptation of popular origin may be mentioned here. In many instances the phallic emblem of Siva is not regarded as a phallus but as a head with eyes and a nose painted on it or affixed to it with metal foils.

Among the Sivaistic deities of the district, Taraknath of

Tarakeswar, wields the greatest influence. His present temple is in existence since about the third decade of the 18th century[34] but his tradition seems to be older. Legend connects him with one mythical Mukunda Ghosh, a milkman by caste, who is supposed to have introduced the deity's worship at the latter's behest. Persons responsible for the management of the temple service and the estates since the second quarter of the 18th century belong to the Dasanami Sivaite sect[35] of northern India. Yet some rituals still followed in the worship of the deity recall the mythical past. Custom demands that during the Gajan festival there should be five main devotees, four amongst whom must be milkmen by caste.[36]

Shandeswar (lit. lord of bulls) of Chinsura town is another important Siva of the district. Siva's association with bulls is a Puranic concept, Nandi, his vehicle, being a majestic ox. Whether the name Shandeswar refers to his connexion with a pastoral people tending cattle besides this Puranic tenet remains a moot point. The temple of Shandeswar is believed to have been established in the 16th century.*

Jateswarnath of Mahanad in Polba P.S. is an old deity. The Mughal emperor Jahangir is credited with the endowment of rent-free lands for its service. The suffix 'nath' appended to the deity's name suggests some connexions with the Nathapanthi Sivaites who once flourished in adjacent areas. Siva, the supreme *nātha* (lord) and the source of *nād*, the primordial sound, became their principal divinity. To them, Siva, the male creative principle, normally remained static with the Kulakundalini Sakti, or the female principle, lying dormant in him. When the latter was awakened through the performance of proper rituals, Siva's creative powers found dynamic expression. Nathapanthi Jugis, mainly of the weaver castes, enjoy a better social status than many of the castes of the same order, for in many Siva temples in Polba and Pandua thanas of the district under their management Rarhiya Brahmin priests perform daily and special services.

Sivaistic cults being iconographically unified in the unadorned *lingam*, it is difficult to determine the oldness of the cult from an analysis of the stylistic characteristics of the icons. However, the Ekapadeswara image, recovered from the ruins of Mahanad, takes us back to the late Pala period when this divinity was conceived as a Bhairab or a manifestation of Rudra-Siva of the Sivaistic-tantrist concept. The antiquity of Mahanad as a seat of Siva worship thus appears to extend into the past as far back as the Pala period, if not earlier.

In some places Siva is conceived as Panchanan (lit. five-faced) but in Hooghly district he is mostly represented by the *ek-mukha* (one-

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* For further details, see entry 'Chinsura' in the chapter on Places of Interest.

faced) lingam. While in Sakta belief Bhairabs are necessary adjuncts of Saktis, according to Sivaistic tenets they are superior to their Saktis. While these male partners are much evident at the temples dedicated to different manifestations of Sakti in the district, shrines primarily meant for them are rather rare. Of the Bhairab temples, one at Tarakeswar and another at Ghatampur in Polba P.S. are actually dedicated to the spirit of ancestors.

Siver Gajan or Niler Gajan, held generally at the end of the Bengali year, is the principal festival of Siva and one of the most popular of all religious ceremonies in West Bengal. On this occasion a special class of *ad hoc* devotees known as the *bhaktyās* and coming from the so-called lower or untouchable castes undergo various forms of physical mortification. The most famous Gajan of the district is held in honour of Taraknath at Tarakeswar, which goes on for five consecutive days at the end of the Bengali month of Chaitra (April) attended by more than a hundred thousand people from all parts of the State. The Charak or the hook-swinging festival was associated with Gajan celebrations in the past. But with its banning under the law, an imitation of it without the use of hooks is practised on rare occasions. All Gajan festivals, again, are not held at the end of Chaitra (April) and some are not even termed as Gajan. Mahanader Jat, held at the village of Nagarpara in Polba P.S., in the month of Chaitra is primarily a festival of the Nathpanthi Jugis. But Mahanad being a Sivaite centre and the rituals observed having a great deal of similarity with the Gajan of Siva held elsewhere, it may not be unreasonable to equate it with the latter. Among the more important of the Gajan festivals of the district are those of Bandipur in Haripal P.S. held in the Bengali month of Baisakh (April-May), Raghunathpur in Uttarpara P.S. held in the Bengali month of Chaitra (April), Bajua in Goghat P.S. held in the Bengali month of Baisakh (April-May), Bengai in the last named P.S. held in the Bengali month of Baisakh, Malaypur in Arambagh P.S. held in the Bengali month of Chaitra and Rauthkhana in Khanakul P.S. held in the Bengali month of Baisakh.

The Sivaratri or Siva Chaturdasi festival held on the 14th day of the new moon in the Bengali month of Phalgun (February-March) is another popular festival of Siva in Bengal. It is primarily a women's festival and most of the connected rituals are observed by devotees of the fair sex. Unmarried women fast and perform rites on this occasion to be blessed with tolerant husbands like Siva. Married women observe the same rituals with an identical prayer and for having children. On this occasion special festivals and fairs are held in honour of Taraknath at Tarakeswar, Jateswarnath at Mahanad, and in the villages of Polba, Ektarpur in Balagarh P.S., Syambati in Goghat P.S., Pilkhan in Khanakul P.S. and in the Khanakul village itself.

Although the Sivaistic cult is very popular in the Rarh region, the

presence of its followers as a sect is not conspicuous. Tantrists of West Bengal do divide themselves into Sivaite-tantrists and Sakta-tantrists, but it is difficult to draw a clear line of distinction between them. Sivaite and Sakta-tantrist beliefs are so fused that it is not easy to differentiate between them as all tantrist practices are highly esoteric. But those who have known the rites report that Sivaite-tantrists attach prominence to the activity of the male principle, while the Sakta-tantrists place more emphasis on the female principle; otherwise the rituals are similar.[37]

The Natha sect

Nathapanthis owe their origin as a sect to Matsyendranath or Minendranath, who, according to Dr. P. C. Bagchi, are one and the same person.[38] The early preceptors were from the so-called lower Hindu castes flourishing in East Bengal. Guru Gorakshanath, another pioneer, was a contemporary of Govindachandra of the Chandra family of the Maynamati region in East Bengal who reigned around the early decades of the 8th centruy A.D.[39] Nathapanthis are Sivaite-tantrists of a special order with Sakti playing an important role in their cosmogony.[40] Some scholars believe that the rituals of the Nathapanthi Kapalik Sivaite sect show distinct traces of their being influenced by the practices of the Buddhist Sahajiya cult prevalent at the time of the rise of the former cult.[41] Nathapantha, according to other scholars, also came under the cross-cultural effects of Sufism at a later date.[42] In the Mahanad-Dwarbasini region of Hooghly, there has also been some fusion of Dharma and Siva worship through the cult of Panchananda—a divinity of the Nathas.[43]

How old is the Natha sect in the Tribeni-Mahand-Dwarbasini area is difficult to say. It seems that even before the flourishing of the Natha sect in this region, the area was an important seat of Siva worship. The numerous Siva-*liṅgas* recovered from this tract bear close resemblance with other *liṅgas* datable to the late Gupta period. It is possible that the original Pasupat Sivaistic religion of the region, of which these *liṅgas* were the objects of worship, changed its character through an inter-mixture with tantrist Buddhism of the Pala period and the folk cult of Dharma and developed into the Nathapanthi Sivaistic cult some time during the heyday of the Mahanad principality.[44] There are reasons to believe that Mahanad was a small feudatory kingdom during the Pala and Sena periods which became virtually independent when Bakhtiyar Khilji conquered Gaur. For nearly a century, up to the conquest of Saptagram by the Turko-Afgans, Mahanad kept her independence. From the name of the principality it seems that its chiefs were Nathapanthis. Whether they were Jugis or not cannot be ascertained. But people now in charge of the services of Jateswarnath Siva are all Jugis by caste and Nathapanthis in their sectarian allegiance.*

* For further details, see entry 'Mahanad' in the chapter on Places of Interest.

The Dasanami Sivaite sect

The Dasanami Sivaites, as a sect, have no roots in the soil of Bengal. "It is worthy of note that almost all Dasanami Muths in Bengal were founded by Brahmins who came from the North-West Provinces and not by Brahmins domiciled in Bengal, and the persons who are now connected with these Muths either as Mohunts or Chelas are fresh arrivals from the North-West."[45] The Sivaite centre at Tarakeswar is the most important stronghold of this sect in the Hooghly district. The finding of another court of law about this religious community is illuminating and bears mention here. "Learned discourses on the Hindu Shastras establish beyond doubt . . . that the Dasanami Sannyasis are Vedic Sannyasis . . . and that the Mathadhari Sannyasis belonging to the school of Sankaracharya are Vedic and not Tantric (sic.) Sannyasis, that the Tarakeswar Math is governed by the Sankaracharya school of thought, that the Mohunt of the Tarakeswar Math . . . is a Mathadhari Dasanami Sannyasi."[46] To gain a foothold into the religious beliefs of an alien land, the Dasanamis have allowed many a local rite and custom to continue at the Taraknath temple at Tarakeswar. Besides, like the people in charge of the Guptipara Math in Balagarh P.S., they have associated themselves actively with Gauriya Vaishnava cults of Krishna, Rama and Shri Chaitanya. Here, again, we find forces of religious integration at work.

During the years of chaos and confusion immediately preceding and following the transfer of the administration of these regions to the British, wandering bands of armed fortune seekers from different parts of India were at large, of whom the Dasanami Mohanta Sannyasis formed a group.[47] About this time some Rajput Kshatriya families of North India were also out to entrench themselves in the district and one of them, the family of Vishnudas, secured the zemindary of Baligarhi Pargana probably in the first half of the 17th century. Vishnudas was a contemporary of the founder of the Tarakeswar Math, Mayagiri Dhumrapan or Samudranath Giri, and Vishnudas's brother, Varamalla, granted extensive rent-free lands in 1785 as an endowment to Taraknath.[48]

Vishnu worship

The earliest images of Vishnu and his accessory deities, Lakshmi and Saraswati, found from different parts of the district, particularly from areas around Saptagram, Tribeni, Dwarbasini and Mahanad, are all from the Pala and Sena periods. Iconographically, they conform to the conceptions of Tribikram Vishnu and Vasudev-Vishnu. The Sena kings were devout Vaishnavas and it was but natural for Vaishnavism to flourish in the area now included in the Hooghly district, which undoubtedly formed a part of their kingdom. But not until the advent of Sri Chaitanya and Nityananda, nearly three centuries after the Turko-Afghan conquest of Bengal, did the cult of Bhakti centering around Krishna, an incarnation of Vishnu, and Radha, his consort, become the prime form of Vishnu worship in Bengal.

Indications of the earlier cult of Vasudev Vishnu are still traceable in Basudev worship at Bansberia and in the worship of Chaturbhuj Sri-Ananta-Basudev at the village of Jolkul in Pandua P.S.

Writing about Sri Chaitanya (born 1486, died A.D. 1534) and his times, Jadunath Sarkar says: "It was the period which witnessed an efflorescence of the Bengali mind symbolised by Lord Gauranga, by whose message of love and forgiveness the whole of Eastern India was carried off its feet. The Bengali mind burst its bonds and found its voice in the sweet lyricism of Radha and Krishna, in the emotional intensity of a resurgent Vaishnavism and in poetry and song. . . .With the renaissance, the rulers of the House of Husain Shah are inseparably connected. It is almost impossible to conceive of the rise and progress of Vaishnavism or the development of Bengali literature at this period without recalling to mind the tolerant and enlightened rule of the Muslim Lords of Gaur."[49]

The Gauriya Vaishnava Bhakti cult initiated by Sri Chaitanya and his followers had an immediate snow-balling effect and became a principal religious and social force in contemporary Bengal. "The basic idea on which the entire structure of its thought system was built consisted in an inexorable faith in the superiority of devotion (*bhakti*) to knowledge (*jnāna*) as the *summum bonum* of the life religious and the only ideal dear to the Master's heart was that of devotion to the deity as a friend (*sakhva-prema*), as parents (*vātsalya-prema*) and as a lover (*kānta-prema*)."[50] In fact, the idea of intense love that seeks fulfilment in the lover and the loved, was, to the devout Vaishnava, epitomized in Krishna, the male principle, and Radha, the female principle. According to the tenets of Gauriya Vaishnavism, Narayana and Lakshmi of earlier Bhagavata Dharma were transformed into Krishna and Radhika.

Scholars have discovered the influence of the dualistic thoughts of earlier Vaishnava saints and philosophers on the dualistic principle of the Gauriya Bhakti cult that seeks to establish an identity between the lover-worshipper and his personal god; the spell of Samkhya thought and of Sakta-tantrist concept on the Vaishnava emphasis on the ecstatic unity of the male and female principles; the sway of Buddhist Sahajiya thought and of Sufism (in the Rarh region of West Bengal, Sufi saints had been most active in Hooghly and Burdwan districts down to the period of Husain Shahi kings) on the Vaishnava emphasis on complete detachment from mundane matters and joyous devotion to a benign personal god through the observance of rites which did not involve physical mortification but were conducive to a mystic transformation of the spiritual state of the devotee. Certain scholars are even of the view that there was some influence of Islam on such aspects of Vaishnavism as emphasis on the congregational form of worship, ritual egalitarianism in religious assemblies and the practice of regarding the preceptor as the incarna-

tion of god. Perhaps all these were in response to the social and religious challenge that Islam had posed at that time.

Gauriya Vaishnava Bhakti cult began to spread in the areas now included in the Hooghly district right from the lifetime of Sri Chaitanya. Abhiram Goswami, a senior contemporary of Chaitanya and a zealous missionary, settled in the village of Krishnanagar in Khanakul P.S. where he installed his deity Gopinath. Uddharan Datta, another disciple of Sri Chaitanya, was a scion of a wealthy merchant family belonging to the Suvarnabanik caste of Saptagram. His personal deity was a *sālagrāmsilā* which he worshipped in Gauriya Vaishnava fashion. Deification of the early Gauriya Vaishnava religious leaders, prevalent in Hooghly district, seems to have been initiated by Uddharan Datta who introduced the worship of Chaitanya and Nityananda by setting up their images at Uddharanpur, named after him and three miles to the north of Katwa in Burdwan district. Raghunath Das Goswami of Krishnapur, Saptagram, a younger contemporary of Sri Chaitanya, was the only non-Brahmin of the six Goswamis of Vrindavan credited with the institutionalization of Gauriya Vaishnava philosophy and rituals. Kamalakar Piplai of Mahesh, near Serampore, a Rarhiya Brahmin by caste, was another contemporary of Chaitanyadeva who, according to *Vaishnavāchārdarpana*, consecrated the famous Jagannath deity of that place but his descendants say that the divinity was installed by one Dhruvananda Brahmachari who left it at the care of Kamalakar Piplai [51] Rudra Pandit, another younger contemporary of Chaitanya-deva, was born at Ballabhpur, now within the Serampore municipality. Vaishnava tradition credits him with the consecration of the well-known deity Radhaballabh of Ballabhpur as also with the construction of a temple by the Bhagirathi, now abandoned and known as Henry Martin's Pagoda. Another section of Vaishnava opinion, however, holds that Birabhadra, son of Nityananda, installed the stone image of Radhaballabh.[52] Khanja Bhagaban Acharya, another follower of Sri Chaitanya, came to settle at Goswami-Malipara in Dadpur P.S. and eventually turned it into an important centre of Gauriya Vaishnavism.

Among other early Vaishnavas who helped the spread of this cult in the district, through establishment of deities, erection of temples, holding of congregational festivals etc. were Parameswar Das of Atpur in Jangipara P.S., who set up the image of Shyamsundar in that village; Krishnadas Thakur of Khanakul, who was a disciple of Abhiram Goswami; Gandharbabar Basu Khan of Seakhala in Chanditala P.S.; Gopal Das of Mahesh-Serampore; Lakshman Pandit of Chatra in Serampore P.S. and Satyananda Saraswati of Guptipara in Balagarh P.S.

In spreading the Gauriya Vaishnava Bhakti cult in the south-eastern Rarh region, Gandhavaniks and Tambulivaniks belonging

to the Nabasakha group of traditional trading castes and Suvarna vaniks, another non-Nabasakha trading community, played important roles. Gauriya Vaishnavism offered to them the social prestige so far denied by the orthodox Brahminical society despite the power of wealth they enjoyed. Sri Chaitanya himself set the example by taking food cooked by Uddharan Datta, a Suvarnavanik by caste, and Abhiram Goswami, one of his most influential preachers, probably married a Malakar lady named Malini. But eventually the Vaishnavas could not disregard altogether the caste distinctions ingrained in the society for centuries. Though non-Brahmin Vaishnavas are quite often found to worship their family deities without the help of Brahmin priests, yet in most of the well-known *Sripāṭs* and other seats of Vaishnava worship, Brahmin priests (who are initiated Vaishnavas) perform the divine services. However, the relative equality of ritual status that Vaishnavism offered, attracted a large number of people from the Nabasakha trading castes, who had already one important means of social leadership, namely wealth, at their disposal.

Gauriya Vaishnavism provided in course of time a great ideological attraction to the economically and socially neglected classes in the fringe of Hindu society. A large number of Bagdis, Bauris, Barujibis, Kaibartas, Namasudras and others, who had been turning towards Islam, now began to look at this creed of simple and humble way to god with reassurance. In fact, some scholars think, that Chaitanyaism was an "important element in attempts made by mediaeval Bengali Hinduism to save itself from the rising tide of Islam . . . and the fact remains that in West Bengal the very classes whose counterparts in the East were converted to Islam in large numbers, remained within the Hindu fold due, no doubt, to a great extent to Vaishnava influence."[63]

It is worth mentioning here that Vaishnava beliefs and practices are not as unified as they are generally thought to be. Besides schools that grew up around the personalities of Chaitanya and the illustrious pioneers like Advaita, Nityananda and the Goswamis of Brindavan, the development of the post-Chaitanya Vaishnava Sahajiya cult changed the character of the Gauriya Vaishnava movement to a great extent. This Sahajiya Vaishnavism borrowed heavily from the thought patterns of the Buddhist Sahajiya creed and was flexible enough to accommodate the beliefs of tantrists of all denominations.[64] It is, therefore, no wonder that in the observances connected with many a Vaishnava deity in the district, influences of the Sahajiya cult are still traceable.

The places where Vaishnava pioneers resided are venerated as *Sripāṭs* by their followers. Besides the *Sripāṭs* already mentioned, there are a few more in the district, namely Madhav Ghose's *Sripāṭ* in the village of Gaurangapur in Khanakul P.S. containing the tomb

of Kamalakar Das, and another, associated with Gangadevi, the daughter of Nityananda, at Jirat in Balagarh P.S., where the presiding deity is Gopinath.

Among important Vaishnava deities in the Hooghly district, mention may be made of Brindavanchandra, Krishnachandra, Sri Chaitanya and Nityananda of Guptipara in Balagarh P.S., Radhaballabh of Ballabhpur in Serampore P.S., Jagannath of Mahesh in the same police station, Sridhara (*sālagrāmsilā*) of Purba Gobindapur, Damodar (*sālagrāmsilā*) of Krishnanagar-Jangipara, Radhakantajiu of Rajbalhat and Radhagovinda of Atpur all in Jangipara P.S. Gopikamohan of Boinchigram and Gopalthakur of Boragari, both in Pandua P.S., Radhagovinda of Haripal, Gopinath of the Biswas family of Dasghara and Nandadulal of Gurap both in Dhaniakhali P.S., Gopinath of Krishnanagar in Khanakul P.S., Radhaballabh, the family deity of the Goswamis of Chandernagore, Gaur-Nitai and Radha-Krishna in Chaudhuripara of Chatra in Serampore P.S., Gopinath of Jirat in Balagarh P.S., Radhakanta-Priyaji and Madangopal-Priyaji of Goswami Malipara in Polba P.S.

Some of these deities do not exactly belong to the Gauriya Vaishnava pantheon. For instance, Janardan of Ramnagar in Arambagh P.S., Sridhara of Purva Govindapur and Damodar of Krishnanagar-Jangipara are conceived as Narayan. Yet, Gauriya Vaishnavism has so influenced every form of Vishnu worship in Rarh, that even such typical festivals of the Radha-Krishna cult as Jhulan and Ras have become the principal festivals of Narayan, Damodar or Vishnu conceived in the form of egg-shaped stones.

The cult of Rama-Sita, very popular in northern India, made but little impression on the people of Bengal. In the Hooghly district, the Rama incarnation of Vishnu is worshipped in about four places only. At Guptipara in Balagarh P.S. the images of Rama, Sita, Lakshman and Hanuman are installed in a brick temple with excellent terracotta embellishments. Raghunandan of Parul-Basudevpur in Arambagh P.S. is another deity of this class well known in the locality. Raghunathjiu, who shares with Krishna and Radhika the same temple at Janai in Chanditala P.S., is Rama again. Rama is also worshipped in the Paikpara locality of Bhadreswar town. The Ramnavami festival is celebrated with great enthusiasm at Guptipara, Pansuli (Khanakul P.S.) and Mohanpur (Goghat P.S.) in the Bengali month of Chaitra (March-April).

Rathajatra or the car festival held in the Bengali month of Asharh (June-July) is the most popular of all Vaishnava festivals. In Hooghly district the car festivals of Jagannath of Mahesh, Brindabanchandra of Guptipara and Gopinath of Dasghara are the most important.*

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* For details, see entries 'Serampore', 'Guptipara' and 'Dasghara' in the chapter on Places of Interest.

The ceremony is also observed at Chandernagore, Dhaniakhali and Khanakul-Krishnanagar.

Rasjatra held on the full moon night of the Bengali month of Karttik (October-November) is another important Vaishnava festival observed with a good deal of enthusiasm at Ghanarajpur and Mahmudpur in Dhaniakhali P.S., Krishnanagar and Atghara in Khanakul P.S., Soaluk in Pursura P.S. and Sripur in Balagarh P.S.

Doljatra held on the full moon day of the Bengali month of Phalgun (February-March), accompanied by 'holi' festivities, is another important Vaishnava festival. On this occasion fairs are held in the villages of Saugandha in Polba P.S., Guptipara in Balagarh P.S., Dwipagaja and Chandbati in Haripal P.S., Bhadrakali in Uttarpara P.S., Atpur in Jangipara P.S., Malaypur in Arambagh P.S., Kishorepur, Ghasua, Mayal and Krishnanagar in Khanakul P.S. and Soaluk in Pursura P.S.

Annual congregations held in commemoration of Vaishnava saints or in remembrance of important happenings in Vaishnava history with group singing of *kirtan* and vegetarian feasting are called *mahotsavs* (or *mochchhabs*) in Vaishnava parlance and are held at Raghubati in Goghat P.S. in the Bengali month of Magh (January-February), Bandipur and Paschim Thakurani Chak in Khanakul P.S. in the same month. Raghunathpur (Khanakul P.S.) in the month of Phalgun (March) and at Akri Fatehpur in Pursura P.S. in the month of Magh. A variation of such fetes is the *harinām saṁkirtan sabhā* of Natibpur in Khanakul P.S. which is observed once a year.

Islam

Even before the conquest of the Satgaon territory by general Zaffar Khan around A.D. 1300, many Muslim saints and ghazis had infiltrated into the area for preaching Islam. "These warrior-saints of Mediaeval Bengal were the Knights-Templers of Islam. . . . Surrounded by a horde of less scrupulous followers (they) used to enter the territory of the Hindu Rajahs as 'squatters' on some pretext or other. Then they would bring down the regular army of the Muslim State upon these infidel kings to punish them for infringing the rights of Mussalmans !"[55]

The pioneers

Muslim tradition says that "Shah Sufi-al-Din, son of Barkhurdar, a noble of the court of Delhi and brother-in-law of King Firuz Shah, came to preach Islam in Bengal. But the local king, Pandav Raja was very powerful and antagonistic towards the Islamic faith. Quarrel broke out between the saint and the King,"[56] when Zafar Khan Ghazi, another warrior-saint, joined the crusading army against the Hindu king. Though Muslim accounts claim that in the war that followed, the Hindu king was defeated, there is reason to believe that "Zafar Khan Ghazi died a martyr in a battle with some Hindu chief (may be Bhudev Nripati or some other) of Hooghly. This shows that he died at the initial stage of the conquest of Satganw

region a few years after 698 A.H. (A.D. 1298/99) in the reign of Kaikaus probably."[57]

It is not known for certain who this Pandav Raja or Bhudev Nripati was. It seems there was then a Hindu ruling family reigning over the Saptagram-Pandua-Tribeni-Mahanad-Dwarbasini region of Hooghly with whom the early preachers of Islam came into conflict. But as their machinations could not reduce the Hindu king, Ruknuddin Kalkaus sent his general Zaffar Khan (not to be confused with Zafar Khan Ghazi—the warrior-saint) to conquer the Satgaon territory which he eventually did. The well-known tower that stands by the Grand Trunk Road at Pandua, evidently on the site of an earlier Hindu temple, is, according to local belief, a memorial erected by the saint-warrior Shah Sufi-al-Din to celebrate his victory over the Hindu prince. To the south of the tower on the other side of the G. T. Road lies the tomb of Shah Sufi-al-Din. The ruined mosque of Pandua, immediately to the west of the minar, was built at a much later date in A.D. 1477. Zafar Khan's mosque at Tribeni is an interesting monument in this context inasmuch as the first centre of Islamic education in this part of the country came into existence in its precincts around A.D. 1298 in the shape of a *mādrāsā*. Two more *mādrāsās* were subsequently set up at the same place in A.D. 1313 and 1502.

Nothing much is known about another warrior-saint, Shah Anwar Kuli or Hazrat Muhammad Kabir of Aleppo, supposed to be entombed at Molla Simla near Furfura in Chanditala P.S. "According to tradition, a Bagdi king ruled in Furfura and was defeated in a battle with Hazrat Shah Kabir Halibi (presumably the same person mentioned above—Ed.) and Hazrat Karam-ud-din, both of whom were killed. . . .An inscription on black basalt in the Tughra character is fixed over the entrance of the *Dargah*. It records the erection of a mosque by the great Khan Ulugh Mukhlis Khan in the year 777 H. (1375 A.D.), and is therefore assumed to belong to the mosque nearby, which is without any inscription. It is said that the mosque was built after Shah Anwar's death."[58]

Another pioneer preacher of Islam was Shah Ismail Ghazi of Mandaran, now in Goghat P.S. "He was a descendant of the Prophet, was born in the holy city of Makkah. He was a devout follower of religion and spent his time in preaching and teaching. After a long and tedious journey, he arrived at Lakhnawati, the capital of Sultan Rukn al-Din Barbak Shah. Sultan Rukn al-Din Barbak Shah was then busy to find out ways and means for controlling floods in the vicinity of Gaur. He engaged all engineers and craftsmen for the purpose, but failed. At last, following the advice of Shah Ismail Ghazi, he came out successful. This brought the saint to the notice of the Sultan. The saint was then appointed to conduct warfare in different frontiers of his kingdom. He defeated Gajapati, the Raja of Orissa

and wrested from him Mandaran. . . .This warrior-saint who did so much for the Muslim Sultanate was beheaded by the order of the Sultan in 878 A.H./A.D. 1478."[59] There is a *dargā* dedicated to his memory at Bhitargarh in Goghat P.S. but the structure appears to have been built only in the closing decade of the 17th century.

Mosques, *dargās*, *āstānās* etc.

Mosques were built both by the ruling Sultans and the public mostly at the instance of the preacher-saints and served as congregational places as well as centres for the propagation of Islam among the non-believers. Important mosques used to be built near the tombs of well-known saints and Sufis or *vice versa*. The Bais Darwaza mosque adjacent to the *dargā* of Shah Sufi al-Din at Pandua, the now ruined mosque by the side of the *āstānā* of Zafar Khan Ghazi at Tribeni, the Tarbiyat Khan's mosque (A.D. 1457), the Ulugh Majlis Nur mosque (A.D. 1487) and the Jama Masjid of Sayad Din Husain (A.D. 1529), all close to the tomb of Sayyad Fakhr-ud-din at Saptagram, the mosque in the vicinity of the *dargā* of Shah Anwar Kuli Halwi at Furfura and the mosque near the tomb of Shah Ismail Ghazi are all cases in point.

Schools

Mādrāsās were built specifically for imparting Islamic education. "Generally these *madrasahs* were built by the side of the mosques or mosques were invariably built in the *madrasahs*. In far off places where only mosques were built they served both the purposes of *masjid* and *maktab*. . . .The two sets of buildings helped the growth of Muslim society and Muslim culture in Bengal and the ruling power played a significant part towards this end."[60]

Sufis

But in the spread of Islam the most important role was perhaps played by the early warrior-saints whose qualities of leadership and a deep understanding of the psychology of the masses were not always unaccompanied by the use of force. In the regions now comprising West Bengal most of these dedicated preachers were Sufis of the Chishtiyah or Surawardiyah schools. Sufis were the most ascetic among contemporary Muslims but certain scholars have suggested that Turko-Afghan Sufis of the Sultanate period of Indian history were a little less mystically inclined and a little more concerned with temporal matters than the Sufi mystics of Persia.[61]

Legends soon began to grow around the life and exploits of the saints attributing divine powers to them. These accounts endeared their memories, and obliquely, the faith they preached to simple rural people from amongst whom came the largest number of converts to Islam. The legend connected with Shah Ismail Ghazi may be mentioned as one of many such tales. He was a general of Husain Shah of Gaur and stayed at Mandaran (now in Goghat P.S.) for some time on his way back from a victorious expedition to Orissa. One night, while saying his prayers in the open, he saw a long line of celestial beings in the sky whom he commanded to build an immense fort like the one at Lanka (Ceylon). This incredible feat—

so goes the story—was accomplished overnight at the instance of the Ghazi. News, however, reached Gaur that the victorious general from Orissa was preparing for a revolt. He was forthwith called back to the capital and summarily beheaded. "When the head has been severed from the body, strange to behold, the headless trunk mounted a horse that stood near, and rode off to the direction of Mandaran, whilst the head flew up and followed the rider, hovering high in the air perpendicularly above the body. At night the headless rider arrived before the gate of Bhitargarh (immediately to the south of the Mandaran fort—Ed.) where two of his servants stood on guard. He told them not to be afraid, and explained what had happened to him in Gaur, and that he had been innocently killed by the king. He then asked them to give him some *pān* (betel leaf). But this his men would not do, saying that his head was high above, and he would not be able to eat. 'Then it is not Allah's will,' exclaimed Ismail, 'that my head should join the body'—for he would have been restored to life, if they had given him something to eat—'go therefore, my head, go back to Gaur, to be buried there.' Thereupon the head returned to Gaur the same road it had come, and the grave where it was buried there may be seen to this day. When the head had left, Ismail asked the guards to open the gates. He entered the town and coming to a certain spot within the fort, he ordered the earth to open herself, when suddenly before the eyes of all, horse and rider disappeared in the yawning abyss. The earth then closed again. These wonderful events were soon told all over the neighbourhood, and crowds of visitors came to see the hallowed spot where the martyr had disappeared."[62] Popular belief has it that a Hindu king of Bardah, on the fulfilment of a vow, built the tomb of Hazrat Ismail which is still to be seen at Bhitargarh.

There are other concrete instances of the spell exercised by these Muslim saints even over influential Hindus. Their phenomenal sway over the common Muslim masses may, therefore, be readily guessed. The mosque near the *dargā* of Shah Sufi al-Din at Pandua has an inscription recording the fact that it was repaired by a Hindu devotee of the saint named Lalkumar Nath, probably a Jugi by caste and a Nathapanthi Sivaite by belief, in 1177 A.H. (A.D. 1763). According to local tradition, Shah Anwar of Furfura saved many a merchant from drowning in the Saraswati which was visited by frequent storms. One such merchant, presumably a Hindu, is credited with the building of the mosque at Molla Simla in 1001 A.H. (A.D. 1601).

As ardent preachers of Islam, these Turko-Afghan Sufis were less sympathetic towards the *kāfirs* than were some of the independent Sultans of Bengal. In this regard a legend connected with the life of Shah Jokai of Dwarbasini in Pandua P.S. is interesting. During the early years of the Muslim conquest of the areas now included in the district, a Hindu king of the Sadgop caste by the name of

Dwar Pal was ruling over the Dwarbasini region. He successfully resisted the first Muslim invasion but allowed Shah Jokai, a Sufi saint, to reside within his capital and bathe in the tank called Jibat Kunda which had the property of curing the wounds of all who bathed in it, and even of restoring to life the bodies of those killed in battle, if they were placed in the holy waters. Shah Jokai, so goes the story, intent upon weakening the resistance of the Hindu king, entered the tank with a piece of beef concealed in his garments and the pollution thus caused destroyed its miraculous properties. Deprived of its help Dwar Pal was totally defeated by the invading Muslim army in a second battle. The same legend is also current in connexion with the defeat of the Hindu king of Mahanad in the hands of the Turko-Afghans.

But all Sufi saints were reportedly not so intolerant of other faiths. There is an *ākhrā* of a certain Vaishnava saint named Bhikharidas at the Khamarpara locality of Bansberia. A legend connects him with Zafar Khan Ghazi of Tribeni, near by. "One morning, it is said, when the saint was cleaning his teeth, Daraf Ghazi of Tribeni (probably a corruption of Jafar Ghazi) came to visit him riding on a tiger. Seeing him, Bhikharidas patted on the wall he was sitting on and told it to move. The wall, with the saint on it, moved forward until he came face to face with the Ghazi. Both came down from their seats and embraced each other. The Ghazi acknowledged the superiority of the Hindu saint and praised him. Thenceforth Daraf Ghazi, from being a hater of Hindus, became an admirer of their religion. studying Sanskrit and composing prayers in that language to the goddess Ganges."[63] Although such colourful myths cannot be accepted as historical evidence, they serve some purpose in unravelling the beliefs and sentiments of the common people of those times.

The Pirs

"Sufis in course of time came to be known as *Pirs* in popular phraseology. It has been pointed out earlier that super-human powers were ascribed to the Sufis. Naturally, the tombs of the *Pirs* became places of pilgrimage where constructions were made giving the name of *dargah*. The devotees illuminated the graves and made offerings to the *Pirs* or their departed souls. The reverence to the *Pir* or the concept of the superhuman power of the *Pir* was not of Bengali origin, rather it was imported from the west through northern India by the immigrants. But in Bengal they found a fertile soil and were established on a solid foundation. The existing local population, the Buddhists had the practice of worshipping the *chaityas* and *stupas* and adoring them with flowers and burning incense. The Hindus had an identical idea in their *Avatarism*. The *Pirs* appeared to them either as the *Tantric gurus* (sic.) or the teachers of the *Sakta* order. It is no wonder that the converts found the *Pirism* in Islam somewhat parallel to their own traditions and superstitions. The

following facts lend support to this conclusion. First, a large number of places where the tombs of Muslim Sufis or their *Chillakhanahs* stand today were originally Hindu or Buddhist sites. Secondly, sometimes false tombs were erected in those places. They became the places of pilgrimage and satisfied the superstitious nature of hundreds of people."[64] Apart from the Sufi saints whose memories enjoy more than local renown, there are other minor personalities venerated in the same manner. One of them is Alman Sahib of Boinchi in Pandua P.S. "Alman Sahib of Hooghly was a Mussalman saint whose spirit is now worshipped by Hindus and Muhammadans alike. The dust from his shrine near Boinchee, if rubbed on the body, is said to remove all kinds of rheumatic pains."[65] The present priest is a Muslim fakir but the post is said to have been held previously by a low-caste Hindu. People offer terracotta horses (just as they do while worshipping Dharma, Manasa or Siva), earthen lamps, five and a quarter annas (equivalent to 33 paise) and *sinni* (a special kind of sweet) to the Pir to earn his blessings.[66]

Besides the historical persons now revered as Pirs, there is a number of imaginary Pirs receiving homage from the credulous masses. The cults of Satya Pir and Manik Pir are instances in point. While the Muslims call the first Satya Pir, Hindus call him Satyanarayan[67] and both attribute to him identical qualities and make similar offerings. In Satya Pir and Satyanarayan, we have the finest instance of religious integration between Hinduism and Islam as practised in rural Bengal. According to "a Bengali poem on Satyanarayan Pir,"[68] composed during the 18th century, the people of Bhadrakali, a locality of the town of Uttarpara-Kotrung, once used to worship a Satyanarayan Pir. They also worship Manik Pir in whose honour a religious fair is held each year in the Bengali month of Poush (January). This latter saint seems to be another imaginary Pir who is propitiated with offerings of condensed milk (*kshir*) and fruits. On the occasion of his festival, special songs composed in his honour, known as *Mānik Pirer Gān*, are sung, which, it should be noted, is an extremely unorthodox practice amongst the Muslims.[69]

Strict ritual equality in Islam attracted a large number of Hindus of the Kaibarta, Namasudra, Jugi, Sadgop and similar other castes to the new faith. Added to this was the proselytizing zeal and diplomatic capacities of the Muslim preachers. But the simple rural converts even after the lapse of five and a half centuries still retain some of their old religious practices like participation in the Gajan festivals of Dharma and Siva as is done by their Hindu counterparts. Conversely, Islam has also influenced the theology, rites and observances of many Bengali folk cults on the fringe of Hinduism.

Ritualistic sects

As elsewhere in Bengal, an overwhelming majority of Muslims of the district are Sunnis of the Hanafi sect. Shiahs are found in almost all areas of Muslim concentration but they are most numerous in

and around Hooghly-Chinsura. Proportionately, affluent agricuturists, white-collar workers and educated persons are mostly Shiahs and not Sunnis. A pioneer of modern education in Bengal, Haji Mohammad Mohsin, was a Shiah Muslim. The charitable fund he created for providing education to Muslim students and medical treatment to the poor is still serving the people of the district. The famous Shiah *imāmbārā* at Hooghly founded by him in 1861 is the most important congregational centre for Shiahs and Sunnis alike in this part of the country. Unlike elsewhere in India, the relations between these two sects in the Hooghly district are not marked by tension and conflict. But the Sunnis usually do not enter into matrimonial alliances with the Shiahs.

Muslim festivals

Id-ul-Fitr, the important Muslim festival at the close of the Ramzan, the month of fasting, is observed at every mosque, *idgāh* and *imāmbārā* in the district, most notably at the Hooghly Imambara and the Saiyad Chand Mosque. The Id-uz-Zoha, popularly called the Bakr-Id, is celebrated in the tenth month of Zil-hajja when prayers, followed by recital of the *Khutbā* are offered in the Hooghly Imambara, the Saiyad Chand and other mosques. Sheep and goats are sacrificed on the occasion. Shab-i-Barat, held on the 14th day of the 8th month of the Hegira calendar, is another important Muslim festival. So is Fatiha-Dowazdaham which is observed on the 12th day of the 3rd month, Rabi-ul-Al. The Moharrum, celebrated on the first month of the Hegira calendar, embodies an expression of sorrow for the Muslims. The Sunnis observe it as an occasion for silent mourning while Shiahs bring out demonstrations on the streets. In the town of Hooghly, Moharrum is celebrated with unusual pomp and pageantry. *Mārziā*, or the funeral service, is held in the local Imambara every night of the festival and on the 7th and the 8th days long processions are taken out with caparisoned horses, banners and buntings. On the 9th night another procession parades the town with *tājiās* and torches. On the 10th day, the day on which the martyrs' burial took place, a final turn-out starts from the Imambara with an effigy of Hussain, which, at the end of the day, is immersed in the Karbala tank near by.

Besides the usual festivals prescribed by the *Korān* or the *Hādis*, there are certain Muslim festivals peculiar to the district. At the shrine of Shah Sufi al-Din at Pandua three fairs are held annually attracting numerous pilgrims to the *dargāh*. The most important of them starts on the 1st day of the Bengali month of Magh (mid-January) and continues for a month. The second fair takes place in the Bengali month of Phalgun and lasts for two days. The annual *urs* of the Pir is held in the Bengali month of Chaitra (March-April) and the accompanying fair lasts for four days. Zafar Khan Ghazi's tomb in Tribeni is the venue of two important fairs in which Hindus and Muslims participate alike. Other local festivals occasioned by

annual ceremonies in memory of Pirs are the Pir Saheber Mela at Dhalerbagh in Polba P.S. held on the 2nd Phalgun (March), Pir Alir Mela at Shahbazar in Dhaniakhali P.S. occurring on the 1st Magh (January), Pir Saheber Mela at Ankpur in Haripal P.S. observed on the 1st Magh (January), Pirer Urs at Nababpur in Chanditala P.S. celebrated in Magh (January-February), Pirer Urs at Furfura in Jangipara P. S. solemnized for three consecutive days in the month of Phalgun (February-March) and Pirer Urs at Natibpur in Khanakul P.S. held in the month of Magh (January-February).

Muslims: number and distribution

The number of Muslims in the district in recent decades and their proportion to the total district population were as below:

Year	Number	Percentage of district population
1931	1,80,217	16
1951	2,06,230	8.12
1961	2,82,413	12.7

Although political factors vitiated the findings of the 1941 Census, it appears from the above table that between 1931 and 1961 the Muslim population increased by 56.7 per cent (or an average of 18.9 per cent per decade) against a growth of 95.4 per cent (or an average of 31.8 per cent per decade) in the total population of the district over the same period. The community has the largest concentration in Chanditala P.S. where it forms 21.5 per cent of the total population. Next are Pandua, Bhadreswar and Khanakul thanas where the percentages are 19.7, 18.8 and 15 respectively. Chandernagore and Uttarpara bring up the rear with 4.7 and 2.3 per cent of the respective thana populations.

Christians: number and distribution

A broad idea of the number of Christians in the district and their percentage increase over the last six decades may be had from the following table:

Year	Number	Percentage of increase over last 30 years
1901	760	—
1931	1,007	32.5
1961	3,216	219.4

It will be seen that although in 1961 the Christians accounted for only 0.1 per cent of the district population, their growth between 1931 and 1961 far outstripped that of the district population, over the same period, which was only 95.4 per cent. At the subdivisional level, Chandernagore has the largest percentage of Christians followed by Serampore and Sadar, in that order, while at the thana

level, Bhadreswar, Serampore and Magra (in that order) have the biggest Christian concentrations in the district. The activities of Christian missionaries, who introduced the religion in the district, have been dealt with in an Appendix at the end of this volume. Almost one-third of the Indian Christians in the district are Roman Catholics and a majority of the rest are Baptists and Presbyterians. Most of them are converts from the lower Hindu castes.

"There are several festivals peculiar to the two oldest Christian churches in the district. The Bandel Church of Roman Catholics dedicated to Our Lady of the Rosary, the oldest church in the State (1599), is associated with a miracle of Our Blessed Lady of the Happy Voyage. Four festivals are specially observed in the church, viz. the feast of the Blessed Lady of Happy Voyage in May; the feast of St. Augustine, in August; the feast of the Blessed Lady of Rosary in November, and in Lent (period from Ash Wednesday to Easter Eve of which the 40 week-days are devoted to fasting and penitence in commemoration of Christ in wilderness—Ed.), a solemn procession representing the journey of Christ to Calvary with the cross on his shoulder. In the Armenian Church at Chinsura, the second oldest church in the State (1695), the feast of St. John on the 25th January is largely attended by the Armenian community of Calcutta."[70] The usual Christian festivals of Christmas and Easter are observed in all the churches of the district according to the rites of the sects to which they belong.

Tribal religions

According to the Census of 1961, there were altogether 90,106 persons belonging to different tribes and forming 4 per cent of the district population. Among them, the Santals formed the biggest single group followed by the Koras, Oraons, Bhumijs, Lodhas and Mundas in order of numerical strength. Most of the tribals of the district consider themselves as Hindus, participate in Hindu festivals and worship Hindu gods and goddesses in addition to the observance of their traditional tribal festivals and rituals which have, however, decreased in number and importance.

Hindu castes

In West Bengal Hindu castes are customarily divided into three broad classes: the Varna Hindu castes, the Nabasakha castes and the Jal-achal, A-jalchal, Antyaja (which are variations of the same name) or untouchable castes. The Brahmins, the Kayasthas and the Vaidyas are usually placed in the first category. But opinions differ about the inclusion of Ugra Kshatriyas and Rajput Kshatriyas in this group. Traditional trading castes like the Gandhabaniks and the Tambulibaniks belong to the Nabasakha group. But Suvarnabaniks are not a Nabasakha *sreni*. The claim of the Mahishyas to Nabasakha status is, again, disputed by many. Artisan castes and a host of other castes traditionally given to specialized manual occupations are usually regarded as untouchables. But Tantubayas, Kumbhakars and Karmakars are in the Nabasakha category. Socially,

these classifications are not of the same compulsive significance now as they used to be in the past since social power and prestige of a caste varies from region to region depending on its size, cohesion and command over wealth. Customs apart, the Hindus are divided into two broad categories, namely those castes which figure in the President's Schedule of Backward Castes and those which do not. Though the Schedule includes names of only Jal-achal castes, it cannot be said that the names of all the socially untouchable castes find a place in it.

Bagdi

Numerically, the Bagdis or the Byagra-Kshatriyas form the largest caste group in the district numbering 2,19,917 persons (or 9.8 per cent of the district population) according to the 1961 Census. More than 45 per cent of the working population among the Bagdis are agricultural labourers, the majority being share-croppers. Those who hold some land as owners hold so little that they have to take to share-cropping or other subsidiary occupations. Despite Duley Bagdis, whose traditional occupation is supposed to be palanquin-bearing, being most numerous amongst the Bagdis of the district, only 1.1 per cent of the latter are engaged in transport services. 1.75 per cent of the Bagdis of the district work as labourers in such modern fields as manufacturing industries and construction.

Brahmins, other Varna Hindus and people belonging to Nabasakha castes do not take water from the Bagdis and Brahmin priests do not usually officiate in their rituals. Caste panchayats, set up on an *ad hoc* basis from time to time, are found only in big Bagdi settlements. The verdicts of these panchayats, mostly presided over by elderly Bagdis who are well placed in life, have no mandatory implication and in the rural areas, where 94.9 per cent of the Bagdis of the district live, decisions of members of the upper Hindu castes usually prevail.

Bagdis, a Scheduled Caste, are divided into the following endogamous sub-castes: (1) Tentulia: as the name suggests, it might have been derived from tamarind (*tentul*) leading to the presumption that it is a totemistic group. But it may not be so as a totemistic group, at least subjectively, is a kin group which cannot be endogamous. (2) Kansaikulia: the name has a distinctly geographical ring and possibly refers to the river Kansai. (3) Duley or Dulia or Duley Behara or Behara: these names refer to the traditional occupation of this sub-caste, namely palanquin-bearing which is an obsolete avocation now. This group constitutes the largest single sub-caste among the Bagdis of the district. (4) Ojha: the appellation refers to the supposed original occupation of the sub-caste relating to magico-medicine. (5) Mechho: they claim to pursue one of the traditional occupations of the caste, namely fishing. (6) Dandamajhis: this sub-caste is supposed to have been responsible in the past for enforcing law and order in the community. (7) Kusmetia: their claim to superior

status rests on the legend that one of their forbears reared the founder of the royal house of Vishnupur in Bankura. (8) Mallametia: as the name suggests, their ancestors possibly hailed from Mallabhum. Within these endogamous groups there is a number of exogamous groups, probably of totemistic origin, which are common to all the sub-castes. These are: Kasbak, meaning the heron; Ponkrishi, the jungle cock; Salrishi or Salmachh, the sal fish; Patrishi, a special kind of bean and Kachchhap, the tortoise. Respective totem objects are tabooed by the groups concerned. Thus a Kasbak is not supposed to touch a heron and a Kachchhap may not eat the tortoise.

Mahishya

Mahishyas are a numerically strong caste in the deltaic regions of West Bengal. They are most numerous in Midnapur district, followed by Hooghly. The majority of them are agriculturists and they claim agriculture as their traditional occupation. Though landless agricultural labourers and poor share-croppers are frequently met with amongst them, many, on the other hand, are fairly big land-owners. Educated children of these families are now in white-collar jobs in fair numbers. Urban occupations have not so far prompted most of the Mahishyas to sever their ties with their country homes where their relations live and look after the landed properties of the joint family. This has resulted in a quite steep socio-economic stratification within the caste.

Caste councils or panchayats, whether permanent or *ad hoc*, are practically unknown amongst the Mahishyas. But wealthy *jotedārs*, traders and educated Mahishyas wield great influence over the community. Mahishyas claim the status of a Nabasakha caste. But the upper-caste Hindus do not take water from them nor do Brahmin priests officiate in their rituals. A special class of Brahmins called Vyasokta Brahmins, with whom proper Brahmins do not enter into matrimonial alliances, serve the Mahishyas.

While Mahishyas deny all connexions with the Kaibartas, whom they regard as Asat-sudras, scholars like Risley, Hutton, Porter and Niharranjan Ray ascribe to the occupational specialization of a section of the Kaibartas and their consequent affluence the reason for the growth of the Mahishya caste. Of the three endogamous groups of Kaibartas in Bengal, the Adi or Jalia Kaibartas are supposed to be engaged in fishing; the Patni Kaibartas, who call themselves Lupta Mahishyas, or extinct Mahishyas, are ranked by the former as below themselves in hierarchy while the Halia or Chashi Kaibartas, who are no longer to be found in the Rarh region, claim the most superior status for themselves by dint of their occupation, namely, agriculture in other parts of Bengal. The aforesaid scholars surmise that the Halia Kaibartas of Rarh were once so numerous and economically and socially so powerful that they joined hands to raise their social status and changed the nomenclature of their caste to Mahishya. This speculative theory apart, the fact is that a higher status is

accorded to the Mahishyas than the Kaibartas by all upper-caste Hindus.

Brahmin

Brahmins are most numerous among the Varna Hindus of the district. In numerical strength they come only after the Bagdis and the Mahishyas. Apart from the fact that residence on the west bank of the Ganges (Bhagirathi) has always been considered to be of special religious merit, countless Brahmin families have been settled, over the ages, with rentfree lands and such other grants by affluent persons of land-owning and trading communities to look after the spiritual well-being of the people or to officiate in rituals and temple services, thus accounting for their concentration in this region.

Most of these Brahmins belong to the *Rārhiya sreni*, a nomenclature derived from the old cultural geographical zone called Rarh, and use the surnames Bandyopadhyay (Banerji), Chattopadhyay (Chatterji), Mukhopadhyay (Mukherji), Gangopadhyay (Ganguly) etc. The *sreni* (sept) is endogamous but is divided into a number of *gotras* (sub-septs) which are exogamous. Bandyopadhyayas belong to the *Sāndilya gotra*, Chattopadhyayas to *Kāshyapa gotra*, Mukhopadhyayas to *Bharadwāja gotra* and Gangopadhyayas to *Sābarna gotra*.

Some of the influential landowning families of the district like the Mukherjis of Boinchee, Banerjis of Telinipara (Bhadreswar), Mukherjis of Champdani, Goswamis of Serampore, Mukherjis of Uttarpara, Mukherjis of Janai, Rays of Arambagh, Mukherjis of Bakulia and Rays of Radhanagar are Brahmins. Many of the affluent *jotedārs* also belong to this group. Because of their better educational background, numerous Brahmins now serve in commercial undertakings and public offices, in educational fields (their traditional occupation) and in other white-collar jobs. It is only the poorer sections which are still engaged in priestly or similar avocations. Basically, because of the above economic and social factors, the Brahmins exercise both religious and secular leadership, especially in the interior of the district.

'Kulinism'

The most remarkable of the social customs of the Brahmins of Hooghly was 'Kulinism' or the system of hypergamy. Although the custom has practically died out under modern conditions, a brief account of it, extracted from the old Hooghly District Gazetteer,[71] would be eminently worthwhile. "Dharasura, the king of Rarh, divided the Rarhi Brahmans into three classes, viz. (1) Mukhya Kulins or the best, (2) Gauna Kulins or the lower class, and (3) Srotriyas or the ordinary 'hearers'. The Gauna Kulins were excluded from the high class of Kulins by Lakshmanas Sena, and, mixing with Srotriyas, were further subdivided into (*a*) Susiddha or highly approved, (*b*) Siddha or the approved, (*c*) Sadhya or capable of being approved, and (*d*) Ari or inimical. Of the original Kulins, only fourteen *gāins* or headmen of villages were considered pure by king Ballala Sena. Three of the fourteen Gauna Kulins became Siddha,

four Sadhya, and seven Ari; while the thirty-seven original *gāins* of Srotriyas were treated as Susiddha.

"In course of time, during the Musalman rule, when there was no longer a Hindu king to control the social system, great changes took place in their social organization. In the 16th century, Devibar Ghatak, an influential genealogist of Jessore, aided by the Hindu landlords, systematized several of the changes which had taken place among the Kulins. The original Kulin families were now subdivided into *Swabhāva* or originally pure, *Bhanga* or broken, and *Bansaja* or those born of ordinary families, i.e., those who had lost all Kulinism. These families were further brought under 36 *mels* or groups, named either after the clan ancestor, such as Sarbānandi or Gopal Ghataki, or after the clan village, such as Phuliyā or Khardāh. The Kulins were also restricted to marriage within their respective *mels*, thus forming endogamous groups; but they continued to be subject to the old rule of marriage outside their respective *gotras* and even *gāins*, a Mukherji giving his daughter not to another Mukherji but to some Chatterji or Banerji, subject to his not being a close relative. A Kulin girl could thus marry only a Kulin boy of her own *mel;* on the other hand, a Kulin boy could marry not only a Kulin girl of the same *mel*, but also a Srotriya girl. If he married a girl of a *Bhanga* or *Bansaja* family, he became a *Bhanga*, but the family into which he married would have an accession of dignity.

"The artificial restrictions in favour of a Kulin bridegroom naturally gave rise to great difficulties in effecting the marriage of Kulin girls and also of non-Kulin Rarhi girls. The competition for Kulin husbands on the part of the non-Kulin classes was as strong as before, while the proportionate number of pure Kulins had been reduced by the loss of those who had become *Bhangas* and *Bansajas*. The result was that polygamy came into fashion. It became popular with Kulins because the accident of birth enabled them to earn a good income; it was accepted by the parents of the girls as offering the only means of complying with the requirements of their social code. Matrimony thus became a sort of profession, and the Kulin husband did not have the trouble and expense of maintaining and looking after his wives, for they were generally left in their parents' homes after marriage."

Pandit Iswar Chandra Vidyasagar, while campaigning against this irresponsible practice, prepared, on the basis of personal investigations, a list of polygamous Kulins of the Hooghly district[78] which was headed by one Bholanath Bandyopadhyay of village Boso (Dhaniakhali P.S.) who had 80 marriages to his credit when he was 55 years of age. Bhagaban Chattopadhyay, another Kulin of Deshmukho (Balagarh P.S.) has gone through 72 marriages before he was 64. It is unnecessary to mention others in this long list as the top two would sufficiently indicate the extent of the evil.

Sadgope

Sadgopes predominate in Goghat, Arambagh, Chanditala and Dhaniakhali police stations and are divided into two large endogamous groups, possibly of geographical origin, namely the Purva-Kuliyas and the Paschim-Kuliyas, according to their residence on the east or the west of the Bhagirathi. Sadgopes having the surname Konar, claim to be of superior ritual status on the ground of their being descended from the eight chiefs who are said to have ruled over the Gopabhum region in Burdwan district.

The traditional occupation of the Sadgopes is agriculture and many of them, especially among the Konars, are wealthy landowners. Some are traders in agricultural produce. Sadgopes are in the Nabasakha *sreni* and, as such Sat-sudras like Vaidyas and Kayasthas, who are practically accorded a Varna Hindu status in West Bengal, and Brahmins accept water from them. Brahmin priests also serve them without hesitation. Wealthy Sadgopes occasionally wield considerable influence in rural life.

Goala

Several castes returning their traditionally prescribed occupations as those of Milkmen or of confectioners use the nomenclature Goala to denote their caste name. Bengali Goalas are either Jadavs or Pallavagopes by caste while Bihari Goalas are either Abhirs or Ahirs. Although the status of a Nabasakha caste has not been formally conceded to them, Brahmins take water from them, regard them as semitouchables, and Brahmin priests serve them during religious ceremonies. The number of wealthy and influential persons among this caste is few.

In *Brihaddharma-purāna* and *Brahmabaibarta-purāna*, the Kayasthas have been described as *karanas* or persons of clerical pursuits. By the end of the Sena period in Bengal, the Kayasthas had attained the status of Sat-sudras of the highest order, being engaged in administrative and clerical occupations under the ruling power and, in practice, they are part and parcel of the Varna Hindu society of today. Their economic moorings and occupational patterns differ very little from those of the Brahmins. In fact, excepting the caste exclusiveness due to the observance of endogamy, casteism is not a marked phenomenon in the inter-personal and inter-group behaviour between Brahmins, Vaidyas and Kayasthas.

Kayastha

Kayasthas of the district preponderate in the urban areas along the Bhagirathi and most of them belong to the preferentially endogamous group *Dakhsin-Rārhi*, so named after the cultural-geographical zone *dakshin* or southern *Rārh*, to which the district belongs. *Dakshin-Rārhi* Kayasthas are traditionally not supposed to marry *Uttar Rārhis* or *Bangaja* Kayasthas and are divided into a number of exogamous *gotras* named after ancient Brahmin sages. Ghoses, Basus, Mitras and Guhas are regarded as holding higher ritual status for being *Mukhya Kulins* as opposed to others belonging to the *Moulik sreni*. These groups are neither endogamous nor exogamous but

when a girl from the 'lower' group marries a man of the 'higher' group, it is regarded as hypergamy. Usually, a larger dowry has to be paid to procure a bridegroom from the Kulin group by the father of a bride from the lower group.

Among the old and important Kayastha families of the district are the Dev Ray Mahasayas of Bansberia, Rays of Seoraphuli, Mustafis of Somra-Sukharia, Mustafis of Sripur-Balagarh, Nandis of Jamgram, Mitras of Kalachhara, Mitras and Ghoses of Atpur, Biswases of Dasghara and Soms of Chinsura.

Tantubaya

Tantubayas or Tantis are the traditional weaving caste forming the largest single group among the handloom weavers of the district. In the mechanized textile factories as well, situated in urban areas, many Tantubayas work as skilled and unskilled workers. In large settlements of Tantis like Rajbalhat, Dhaniakhali, Dwarbasini, Haripal, Begampur and Kaikala, where other castes are neither so numerous nor economically or ritually so powerful, wealthy Tantis command respect and exert leadership in social matters. But formal or informal caste panchayats are unknown among them. They belong to the Jal-chal Nabasakha caste for whom Brahmins would perform ritual services. In big centres of handloom weaving, Brahmins are even found to serve as wage-earning artisans under them. Tantubayas are divided into a number of endogamous sub-castes amongst whom the Aswini-tantis are the most numerous in the district claiming the highest status, followed by the Basaks who form the next largest group. Those of the weavers by caste, who have taken to trade in handloom products and do not work as weavers any more, are now-a-days designating themselves as Tantubaniks.

Bauri

According to the Census of 1961, there were 37,654 Bauris in the district constituting about 1.7 per cent of its population. Bauris, "whose features and complexion stamp them as of non-Aryan descent, although evidence is wanting to affiliate them to any particular tribe now in existence,"[73] have circumstantially been obliged to specialize in unskilled manual labour of all kinds. The more affluent among them are either share-croppers or small-plot-holding cultivators or owners-cum-drivers of cycle-rickshaws. There is practically no economic stratification amongst them and they lie, both socially and economically, close to the bottom of the Hindu society. No caste Hindu or a member of any of the Nabasakha groups would take water from them. Since no Brahmin officiates in their rituals, they have their own priests. Caste panchayats set up on an *ad hoc* basis exercise some authority among them in matters relating to holding of festivals or the settling of inter-family or intra-family disputes. Bauris are divided into a number of sub-castes based on occupational specialization and/or geographical distribution. These groups are supposed to be endogamous, but "the few exogamous sub-divisions which we find among the Bauris have clearly been

borrowed *dignitatis causa* from the higher castes and are inoperative for matrimonial purposes, as marriage between the members of the same *gotra* is not forbidden.[74]

Tili

Tilis are a Nabasakha caste whose traditional calling is oil trade but they are now found in other callings also. Brahmins render ritual service to them without hesitation. Wealthy cultivators, *jotedārs* are not rare among the Tilis but many of them are share-croppers, small shop-owners and skilled and unskilled workers in manufacturing industries. They do not have any caste councils or panchayats. But being a caste with a fair number of wealthy and educated persons, they aspire for social leadership. Tilis are divided into three endogamous sub-castes, the Ekadas Tilis being ranked the highest among them.

Muchi

Those who have shoe making or shoe mending as their traditional profession, if of Bengali origin, would call themselves Muchis, and if of Bihari origin, would prefer the caste name Rabidas or Ruidas. All of them are, however, regarded by the higher Hindu and Nabasakha castes as untouchables. Brahmins belonging to the Rarhiya *sreni* would never serve them. But the Muchis regard the Charmakars or Chamars, who are traditionally engaged in tanning and processing of hides and skins, as inferior in social status and would never enter into marital alliances with them.

Teli

The traditional occupation of the Telis is oil pressing and they do not belong to the Nabasākha castes. The economically better off among them are either landed gentry or traders in foodstuff. There is considerable economic stratification among the Telis of the district and the more affluent are usually served by degraded Brahmins. Telis of the district are divided into three endogamous sub-castes, occupying different ritual positions in a vertical scale of rank-hierarchy. Ekādasi Telis claim the highest status and observe penance (*ashauch*) for 10 days after a death in the family while others observe it for a month. Women of the Ekadasi Teli sub-caste can wear nose-rings, while others cannot.

Kaibarta

Of the three sub-castes—Jalia, Patni and Halia—into which the Kaibartas are divided, the Jalias form the largest group while the Halias are totally absent from the district. About 30% of the working population of the Jalia Kaibartas in the district are still engaged in fishing, their traditional occupation, some 14% are cultivators with small holdings or are share-croppers, 7% are landless agricultural labourers, and 20% are industrial wage-earners. Patni Kaibartas are mostly boatmen. Jalia Kaibartas attribute to themselves a status superior to the Patni Kaibartas who regard themselves as Lupta Mahishyas. Both the sub-castes are endogamous, are regarded by the upper caste Hindus as untouchables and Brahmin priests do not serve them. They are included in the President's Schedule of Backward Castes. Informal caste councils of elderly men, set up on an *ad hoc*

basis, decide their caste disputes but in wider issues the leadership comes from influential people of upper castes.

Kaora

According to Risley, "Kaora is a sub-caste of Hanris in Bengal. They rear pigs and prepare *gur* or molasses from the juice of date-trees."[75] Some of them now hold small plots but the majority is employed as landless agricultural labourers or share-croppers. Urban Kaoras are usually unskilled day labourers. There is not much of economic stratification among them and they decide their disputes through informal caste councils. Kaoras are a backward caste regarded as untouchable by the upper caste Hindus.

Napit

Traditionally, Napits are barbers by profession and Brahmins would take water but not cooked food from them. Besides professional functions, they render to the upper and Nabasakha castes, important ritual services during marriage, *upanayana* and *srāddha* ceremonies but would not do the same for Asat-sudra and Antyaja castes.

Karmakar

Karmakars are a Nabasakha caste from whom Brahmins can take water and other Nabasakha castes cooked food. Brahmins have no objection to serve them ritually. They are, by tradition, metal workers and traders in metalware. But urban Karmakars are now usually employed as skilled workers in manufacturing and servicing industries and their rural counterparts as cultivators and share-croppers. They are divided into a number of strictly endogamous sub-castes stemming from groups into which their forbears, working on different metals, were divided. These sub-castes, divided into exogamous groups or *gotras*, are again sub-divided into certain semi-endogamous geographical groupings or *thāks*.

Kumbhakar

The Kumbhakars, the traditional potters, are a Nabasakha artisan caste ranking a little below the Nabasākha trading castes. In Hooghly their rank is not so high as in Nadia and their artisan guilds do not function as caste panchayats as they do in some parts of Nadia and 24-Parganas.

Rajput, Kshatriya

The Rajputs or Kshatriyas of the district are mostly found within Tarakeswar and Haripal police stations and claim descent from the Rajput mercenaries of the late mediaeval times. They form a strictly endogamous group and their marital alliances are with those of the same caste in Burdwan and Bankura districts. They usually eat rice only once a day and that before nightfall, the evening repast usually consisting of wheat *chāpāṭis*. Unlike the Bengali Hindus proper, the Kshatriyas follow the *Mitāksharā* law regarding inheritance and family organization. Kanaujia Brahmins are normally employed for their ritual services. They are mostly rich landowners with considerable influence in the countryside. Many of them are educated and engaged in trade and business and in white-collar jobs in urban areas.

Gandhabanik

Traditionally, Gandhabaniks are traders in spices and this avocation has built the fortune of many of them. But nowadays many of them

are found in transport, storage or other business. They also carry on large-scale forward trading in agricultural produce. Gandhabanik settlements occur along the old courses of some of the derelict rivers of the district, namely the Saraswati, Kunti, Kana Damodar etc. During the days of Saptagram's prosperity, the Gandhabaniks there were quite influential and wealthy—a position which is still retained to some extent by the members of the community who have formed for themselves an exclusive semi-endogamous group. This, as also the unity of economic interests, has given the Gandhabaniks of Hooghly, a Nabasakha rank, a cohesion and a sense of belonging to their own social group in their wider political and social participations.

Tambulibanik

Like the Gandhabaniks, the Tambulibaniks also prospered during Saptagram's days of glory and inhabited the same regions. According to Risley, they "prepare and sell betel leaf, which they buy from the cultivator." This might have been their original occupation but now the relatively affluent among them are land-holding cultivators, shop-keepers or white-collar workers. Although belonging to the Naba-sakha castes, they rank lower than the Gandhabaniks in Hooghly district The Tambulis of West Bengal are divided into five non-rigid endogamous sub-castes or *thāks*, namely Saptagrami or Kusaddiya, Astagrami or Katki, Chauddagrami, Biyallisgrami and Bardhamani.

Suvarnabanik

Originally, traders in gold and gold ornaments, Suvarnabaniks are now found in all manner of occupations. Most of them are affluent people yet they do not belong to the Nabasakha castes, are regarded as Jal-achal and only degraded Brahmins officiate in their rituals. Suvarnabaniks too display a sense of belonging to the caste which governs many of their social or political activities but their overall impact on the society is not comparable to that of the Gan-dhabaniks. The ancestors of the present-day Suvarnabaniks played an important role in the trade of the European merchants in and around Chinsura in the 18th and 19th centuries.

Namasudra

Namasudras are an Antyaja caste ranking with those in the Jal-achal category. They are mostly agricultural day labourers, share-croppers and small plot holding cultivators in the villages and un-skilled wage earners in the urban areas.

Jugi

Jugis or Jogis are an artisan caste—traditionally manufacturing coarser varieties of cloth. They do not enjoy Nabasakha status, only degraded Brahmins serve them, and the upper castes do not take water from their hands. But in the Siva temples of the Jugis in the Mahanad region in Polba P.S., upper class Brahmins conduct the services.

Hāḍi

Hāḍis are an Antyaja caste traditionally engaged in basket making and pig rearing. Some of them work as unskilled day labourers and agricultural hands. Brahmins neither serve them nor take water from them.

Muslim

Sheikhs are most numerous among the Muslims of Hooghly. They and the few Saiyads who inhabit the district do not form

exclusive endogamous groups except when they follow varying sectarian beliefs like Sunnism and Shiaism. The stratification which matters most stems from the differences between the Ashrafs and the Ajlafs who are, however, found both among the Sheikhs and the Saiyads. Ashrafs of today are the descendants of a mediaeval gentry holding, for religious purposes, extensive rent-free *Āymā* lands. Their economic strength ensured for them a better education and important positions in public life. They are found mainly at Pandua and Hooghly in the Sadar subdivision, at Furfura, Sitapur and Bandipur in Serampore subdivision and at Arambagh in the subdivision of the same name. The Ajlafs, on the other hand, include all other Muslims, the masses of whom are agriculturists and workers in industries, transport, storage, communication and petty white-collar jobs. The Ashrafs do not normally sit and dine with the Ajlafs nor do they usually enter into marital relations with the latter. But marriages are now being concluded between the two groups if there is equality in status and affluence. The Jolahs, or the traditional weavers, and the Kabaris or Kunjras, the traditional vegetable sellers, rank very low in the social hierarchy of the local Muslims. Other Muslims do not dine with them and their marital alliances are limited within their own group. Many of their social conventions resemble those followed by Hindu Antyaja castes. They are mostly weavers of coarse cloths, vegetable sellers, tailors, agricultural labourers, share-croppers, fishermen, unskilled labourers and petty shop-keepers.

SOCIAL LIFE

Relation between social classes

Before the enactment of the West Bengal Estates Acquisition Act of 1953, agrarian relations in Hooghly were based on a graded organization with the ryots lying at its base and the zemindars at the top with as many as seven layers of intermediaries in between in many areas. Pressure of rent was thus heaviest on the actual cultivators at the bottom. For the intermediaries no increase of rent was unbearable, as they could always shift the additional burden downwards to the tillers of the soil who had no other option but to stick to land. The Bengal Tenancy Act of 1885 sought to establish a reasonable ratio between the rent to be paid by the actual cultivator and the revenue to be paid to the State by the zemindar. It also tried to protect the tenancy rights of the cultivator, by freeing him, to a certain extent, from the fear of eviction at the will of his immediate superior landlord.

The landed gentry in Hooghly were mostly from the Dwija-varna (twice-born), Sat-sudra and Navasakha castes, among whom, Brahmins, Kayasthas, Gandhabaniks, Tambulibaniks, Rajputs, Vaidyas, Telis and Mahishyas, in that order, predominated. Another important group was the Ashrafs. At the lowest rung of the agricultural ladder were the cultivators mostly belonging to the Tribes and Castes mentioned in the President's Schedule and the lowest Muslim

castes. Usually, the Bagdis, Bauris, Namasudras, Kaibartas and Ajlaf Muslims were the *korfā* ryots, many of whom took to share-cropping to supplement their subsistence incomes. The lot of the *sthitibān* ryots was slightly better than that of the *korfā* ryots, inasmuch as they held rent-free homestead lands and could not be evicted at the will of the landlords.

The resident landlords and the intermediaries were the leaders of the rural society by virtue of their economic power. Brahmin and Ashraf zemindars enjoyed a ritual status in addition to their secular strength. Due to large scale commercialization of agriculture in many parts of the district, the grain traders-cum-money lenders, also attained a position of influence through binding forward contracts in food and cash crops.

Impact of recent land legislations on social relations

The West Bengal Estates Acquisition Act of 1953 has done away with the zemindars and intermediaries and their rights on land. The cultivators now pay rents direct to the State. A ceiling has been fixed on individual holdings. The landed gentry of the past have now become owner-cultivators but most of them do little beyond supervising cultivation through *bargādārs*, keeping a portion of their lands in *khās* which they cultivate with the help of hired labourers. Many of this new rural class have other sources of income, from trade and commerce or from white-collar jobs. Their continued economic strength enables them to play leadership roles in the democratic institutions lately set up in the countryside. Traders-cum-money lenders specializing in forward trading also have their share in local leadership. Another class, not ostensibly connected with any means of production, is now coming up as a formidable contender by virtue of its real or supposed contacts with the administration. At the other end of the scale, the share-croppers do not seem to have profited adequately by the otherwise well-intentioned agrarian legislation which conferred certain occupancy rights on them based on continued cultivation of a plot for five successive years as the purpose of the law is being frustrated by the poverty and ignorance of the *bargādārs* standing in the way of their pushing their legal claims.

Social relations in handicrafts sector

Handloom weaving is by far the most important cottage industry of the district, the main centres being villages around Chandernagore town, Dhaniakhali, Rajbalhat, Atpur, Dwarhatta, Jangipara, Khanakul-Krishnagar and Mayapur. At all these places there are *entrepreneurs* owning many looms worked by hired labour. Next to them are owner-weavers who work themselves and also employ men on surplus looms. At the bottom of the ladder are those who do not own looms but work as wage-earning labour under others. The affluent weavers at the top of the handloom hierarchy are mostly from the Aswini Tantubaya caste. They are also found in the handloom trade. The wage-earners, on the other hand, are recruited more often from castes other than the traditional weaver castes,

including Brahmins and Kayasthas, among others. In the more important centres of handloom weaving in the district, Rarhiya Brahmins take water from the hands of the Tantubayas and also serve them, which they do not do where their influence is poor.

Social relations in the modern industrial sector

The following extracts from the findings[76] of Sm. Meera Guha of the Department of Geography, University of Calcutta, who carried out extensive investigations in and around Rishra town in 1963, will throw ample light on the changing social relations obtaining in the industrial belt of the district stretching along the Bhagirathi.

"By 1757, the British had succeeded in ousting other European competitors and they exercised a monopoly in the trade of the country by means of extending their political power. In the first stage of this process, agriculture was commercialized, and plantations of silk, indigo and the like became British monopoly. . . . This policy of protection also dealt a death-blow to the handicraft industries and the artisans were deprived of their hereditary occupations. The old Indian economy was severely dislocated. The final stimulus to the reorientation of production centres in the new economy was given by the introduction of steam traction. The population that migrated to these new centres showed selective tendencies based on the particular opportunities offered to them. . . .

"The labour population (of Rishra), in the main non-Bengali, comes from Andhra (women recruits), Bihar, Uttar Pradesh and Orissa, and is usually recruited from several castes. . . . They show a community structure with strong village ties. Often a particular skilled group has a traditional background of technical knowledge, as in the case of the weavers in the textile mills, who are all Muslim artisans from Uttar Pradesh. Whatever may be the background for the immigration of the labour population, it shows distinct preferences for grouping. When not provided with mill housing, this population gravitates towards its own group in 'mohallas'. . . . Mutual aid in times of crisis, or on particular social functions like the festival of holi or muharram demarcates these distinctivenesses more clearly. Yet during labour disputes between employer and employee the trade union cuts across these divisions and creates a fresh pattern of loyalties.

"Of the original Barui, Dhenki and Chasa population (of Rishra), only 20 families are still engaged in cultivation, while the rest are employed in factories. The Bengali population finds employment as office staff in the industrial units and is recruited locally or from Serampore, Konnagar and Chandernagore. The economic stratification is placed thus: Labour—non-Bengali; office-staff—Bengali; executive—non-Bengali.

"Social segregation, as in the case of the labour group, is found at higher levels also. For example, a women's association, the Rishra Mahila Mandal, is composed of wives of executives from the industrial

units in the neighbourhood. There are altogether 36 members of whom only three are Bengalis, the president and secretary both being non-Bengali. In the second instance, the Rotary Club, which represents an area from Bally to Baidyabati is composed of professional executives from industries ranging from jute-milling to automobile manufacturing. The total number of members is 21, of whom four are Bengalis, while the president is a non-Bengali.

"The changing economic pattern has led to the evolution of a new functional order in the spatial distribution of urban organization. The population character also has undergone a complete change. The wage-earner, in the new economic stratification has invaded the scene of production, and the community interests show a variety of forms. Some of these have not been freed by the urbanization as in the case of the labour groups in Rishra, where zilla loyalties still persist. The new structure and functions of urbanism have thus initiated a process of change on the patterns of human relationships, in which earlier ties of caste, village, district are slowly subjected to disintegration."

Property inheritance and family structure

The Dayabhaga system of inheritance is followed by the upper-caste Hindus including the Nabasakha castes but the Kshatriyas of the district follow the Mitakshara system. The Hindu Succession Act, which confers for the first time property rights on the female members of a Hindu family does not appear to have changed the situation materially. The daughters, who are now entitled to share paternal property equally with their brothers, seldom put up their claims. The masses follow the higher castes in this respect keeping within their own caste practices.

The undivided joint Hindu family found in the district is usually composed of several elementary families having collateral kinship relations on the paternal lines. Each son inherits equal share of his father's portion of the property and remains a partner of the property so long as it remains joint. Not very long ago, individual family members could not possess any property of their own as distinct from the joint family property. But this limitation is no longer operative especially in the urban areas. The classical type of undivided Hindu joint family under the Dayabhaga system was one in which all the members shared one household and lived in the same mess. But this precedent is fast disappearing and only vestiges of it are to be found now among land-owning and joint business-owning families, mostly in the urban areas belonging to the upper Hindu castes, including the Nabasakha trading castes. The more common type found in the district, is the one in which the source of income, namely land or business interest etc., remains under joint ownership but there are separate hearths for each of the component units. With the fixation of land ceilings under the West Bengal Land Reforms Act, an important change has taken place in the structure of big

land-owning families. To evade the ceilings, total land holdings have mostly been divided up, according to individual shares, but family ties have tightened at the same time to prevent a real break-up of the joint family, to the benefit of all. Among the A-jalchal and Asat-sudra castes and tribes, the small plot-holding or share-cropping people in the rural areas, and the white-collar workers in towns, extended families are an exception rather than the rule. In such cases, the elementary family is considered to be the real nucleus of the household. The overall trend is towards the atrophy of the joint family system which may be attributed to unmanageable growth of members in the families, better employment opportunities in the urban areas etc. The artisans of the Nabasākha or the A-jalchal castes and the factory labourers usually form elementary family groups.

Most of the Muslims in the district living on agriculture have extended families with first and/or second generation kinship ties on the paternal side. Those engaged in business and white-collar jobs are equally divided between extended and elementary household groups. The current swing towards elementary families is no less pronounced among the Muslims than among the Hindus.

Home life: size of households

A sample survey covering 20 per cent of the households in the district, carried out by the Superintendent of Census Operations, West Bengal, in 1961, throws interesting light on the sizes of households classified according to occupations. It is as follows:

TABLE OF SAMPLE HOUSEHOLDS BY (*a*) RANGE OF MEMBERS AND (*b*) OCCUPATIONS IN RURAL AND URBAN AREAS, ACCORDING TO CENSUS, 1961 (BASED ON 20% SAMPLE).*

Nature of Households	Total No. of Sample Households	Size of Sample Households				
		Single Member Households	2-3 Member Households	4-6 Member Households	7-9 Member Households	10 Members and over Households
TOTAL	79,194	8,486	17,986	29,231	15,539	7,952
Rural Areas	56,464	4,919	11,735	21,809	11,879	6,122
(*i*) Households engaged neither in cultivation nor in household industry	23,635	3,660	6,361	9,171	3,408	1,035
(*ii*) Households engaged in household industry	1,650	142	376	641	346	145
(*iii*) Households engaged in cultivation	31,179	1,117	4,998	11,997	8,125	4,942
Size of holding group (in acres)						
Less than 1	6,389	390	1,507	2,934	1,203	355
1.0-2.4	11,048	458	2,055	4,710	2,795	1,030
2.5-4.9	7,354	156	912	2,704	2,241	1,341
5.0-7.4	3,308	53	277	948	1,049	981
7.5-9.9	1,145	15	73	289	329	442
10.0-12.4	784	11	49	160	218	346
12.5-14.9	295	7	25	52	78	133
15.0-29.9	577	9	40	112	150	266
30.0-49.9	89	5	14	21	23	26
50	50	2	8	15	14	11
Unspecified	140	11	38	52	28	11
Urban Areas	22,730	3,567	6,251	7,422	3,660	1,830

* Total number of households in the district, according to the Census of 1961, was 4,23,026 of which 3,01,495 were in rural and 1,21,531 in urban areas.

Marriage

Age at marriage

The table below, prepared from the data provided by the 1961 Census, gives, according to respective age-groups, the percentages of persons having different marital status to the total population in each age-sex group:

AGE AND MARITAL STATUS : CENSUS 1961

Age-group	Never married — Percentage of: Males to the total male population	Never married — Percentage of: Females to the total female population	Married — Percentage of: Males to the total male population	Married — Percentage of: Females to the total female population	Widower/Widow — Percentage of: Males to the total male population	Widower/Widow — Percentage of: Females to the total female population	Divorced or Separated — Percentage of: Males to the total male population	Divorced or Separated — Percentage of: Females to the total female population
All ages	57.5	45.6	39.6	40.0	2.3	13.9	0.6	0.5
10-14	98.6	89.0	1.3	10.8	nil	0.05	nil	0.1
15-19	92.1	28.3	7.7	70.2	0.03	0.7	0 04	0.8
20-29	44.6	5.3	54.4	90.0	0.6	3.0	0.3	0.9
30-39	9.5	1.5	88.3	82.7	1.7	14.9	0.4	0.7

The above table may be profitably compared with another below, prepared from similar data provided by the Census of 1931, to note the changes brought about in a generation.

AGE AND MARITAL STATUS: CENSUS 1931

Age-group	Unmarried Percentage of: Males to the total males of the group	Unmarried Percentage of: Females to the total females of the group	Married Percentage of: Males to the total males of the group	Married Percentage of: Females to the total females of the group	Widower/Widow Percentage of: Males to the total males of the group	Widower/Widow Percentage of: Females to the total females of the group
All ages	44.2	25.9	51.3	48 6	4 5	25.5
10-14	92.6	44.0	7.2	53.7	0.1	2.3
15-19	62.0	2.7	37.4	88.5	0.6	8.8
20-29	26.3	0.8	71.5	81.0	2.2	18.1
30-39	4.8	0.4	89.9	61.2	5.3	38.4

The most significant change in course of a generation from 1931 to 1961, has been an upward movement of age at marriage, both for males and females. In 1931, 7.2% of males used to get married between 10 and 14 years of age; the corresponding figure for 1961 was only 1.3%. 37.4% of males were married between 15 and 19 years in 1931 while only 7.7% of them in that age-group were found married in 1961. Similarly, in 1931, 12.6 per cent of women in the age-group of 0 to 9 years used to be given in marriage but the corres-

ponding figure for 1961 was nil. 53.7% of females between 10 and 14 years of age used to be married off in 1931 but this percentage precipitately dropped to 10.8% in 1961. Analogous figures for females in the age group 15-19 were 88.5% in 1931 and 70.2% in 1961. The Sarda Act enforced in 1929 to prevent child marriage set the lower limits for age at marriage of males and females at 18 and 14 years respectively. To what extent this well-meaning piece of social legislation has been infringed will be apparent from the above figures.

It should be pointed out that in practice marriageable age varies from caste to caste, from one tribe to another and among different religious communities. It also depends on the occupation, economic status, educational attainments and residence in rural and urban areas of the family concerned. Generally speaking, educated gentry from the upper castes in rural and in urban areas seem to set the standards for the Hindus while the Ashrafs do the same for the Muslim community.

Widow remarriage

Widowhood is widespread in West Bengal because of the common custom among the Hindus and Muslims alike to have grooms fairly older than the brides. The age-gap between the partners in a marriage is gradually closing in of late, particularly in the urban areas with a corresponding decrease in the number of Bengali widows. Although permitted by law, widow remarriage does not usually find favour with the upper caste Hindus of the district including the Nabasakha castes. The Antyaja castes, however, do not suffer from any such limitations although among the Bauris and Bagdis the second marriage is not celebrated with the same animation as goes with the first. A Bauri or a Bagdi widow is normally expected to marry the younger brother of her deceased husband; any other suitor is required to pay a bride-price. The Muslims of the district are not averse to widow remarriage but they also do not go in for gaiety during the second marriage.

Divorce

Though divorce has always been looked down upon by the upper Hindu, Nabasakha and many A-jalchal castes, it has been an accepted practice among many Antyaja castes. Among Bauris and Bagdis divorce and remarriage of divorcees are long standing customs. To effect a divorce, Bagdis, Lohars and Doms have to take prior permission of their caste panchayats; no permission is, however, necessary for remarriage. Divorce and remarriage of widows and divorcees are also prevalent among the Santals and Koras and Muslims of the district.

The Hindu Marriages Act of 1955 prohibits bigamy and allows either of the parties to a marriage to seek for divorce or for restitution of conjugal rights on sufficient grounds. Though Hindus of the district in general are still not very favourably disposed towards the unorthodox provisions of this Act, yet matrimonial suits are on the increase among the educated Brahmins, Kayasthas and Vaidyas

and among the urban people from all castes. The following table would indicate the position in this behalf.

Year	Total No. of cases filed	Divorce suits		No. of other matrimonial suits
		Filed	Allowed	
1956	28	4	2	24
1957	36	8	3	28
1958	19	3	2	16
1959	32	7	5	25
1960	41	7	5	34
1963	—	16	3	—
1964	—	24	8	—
1965	65	25	12	40

Polygyny

Except among the Kulin Brahmins, Kulin Kayasthas, land-owning Kshatriya-Rajputs and rich Gandhabaniks, Tambulibaniks, Suvarnabaniks, Tilis, Telis and Muslims, polygyny was never widely practised in the district. But among those that were given to it, it was, in many instances, done to excess, as has already been described under the section 'Kulinism' earlier in this chapter. With the coming of the Hindu Marriages Act, the Hindus have been generally freed from this evil but it still persists in some measure among the Muslims.

The inhuman custom of sati, stemming partly from the practice of polygyny, appears to have been more widespread in Hooghly district than elsewhere in Bengal. There were 112 recorded cases of sati in the district in 1817 and 200 in 1819[77]. It was left to Raja Rammohan Ray,* an eminent son of the district, to rouse public opinion against this horrible custom which was eventually abolished by William Bentinck.

Dwelling houses

The Hooghly District Census Handbook[78] gives a good account of the house-types and the density of houses in the district in the following words:

"O'Malley described in the Census Report of 1911 . . . that 'In Bengal dwelling house, or, as it may perhaps be more properly called, the homestead, is as a rule composed of four huts, built round and facing a central courtyard, with detached cattle-sheds and out-houses. . . They are usually built on raised plinths, and the walls consist of bamboos or reeds plastered with mud, or are built of earth, which, in the lateritic districts of West Bengal, hardens with exposure to the air almost to the consistency of stone. . . . The roofs are covered with thatch of considerable thickness and have a curved hog-backed ridge, especially designed for withstanding the heavy rainfall of the delta. Sometimes the roofs are tiled and those who can afford it are beginning to roof their houses with corrugated iron. . . . '

"The picture remains very much the same even today for this district of Hooghly as well. Linear clusters and clusters around a

* See entry 'Rammohan Ray' in the Appendix entitled 'Some eminent sons of Hooghly' at the end of the volume.

central courtyard are very frequently seen in the village side. . . . The pucca (sic.) houses, the walls of which are built with burnt brick are, of course, not quite uncommon in this district. . . . In the urban areas where such type of houses are very much common they account for about a little more than three-fourth (sic.) of the total number of houses situated in the towns. In the rural areas pucca houses constitute about 13.34 per cent of the total rural houses of the district. . . . Such houses constitute about 78 per cent of the houses of the different towns in Serampore subdivision and in its rural areas for every one hundred houses the wall of about twenty-three are made of burnt brick. Pucca houses are less common in Arambagh subdivision. Even in Arambagh town only 15 per cent of the houses have pucca structure. . . .Pucca houses constitute 15.47 per cent of the total houses of the area consisting of Tarakeswar, Singur, Haripal, Jangipara, Chanditala, Dhaniakhali, Polba, Pandua and Balagarh police stations. In the highly industrialised and urbanised police stations along the river comprising of (sic.) the area of Uttarpara, Serampore, Bhadreswar, Chandernagore, Chinsura and Mogra police stations, pucca houses are very common. In the villages of this tract a little less than half (46.92 per cent) of the total houses have brick walls and in the chain of towns contained in this tract about 79 per cent of the total houses have pucca structure.

"Mud houses are more common in rural areas of the district. They constitute about 81.22 per cent of the total houses in the rural areas of Hooghly. Predominance of mud houses is observed in Arambagh subdivision. . . .In the rural areas of Chandernagore subdivision mud structures are more common than in the rural areas of either Sadar or Serampore subdivision. In the former case they account for 81.81 per cent of the total houses whereas in the rural areas of Sadar and Serampore subdivisions nearly three-fourths of the houses are mud walled.

"Majority of the houses in the rural areas of Hooghly are thatched with straw, leaves, reeds of bamboo, a little more than half of the house (52.58 per cent) falling in this category. Next come the houses shaded with tiles, slates of shingles. . . .In the towns of Hooghly more houses are found to have been roofed with tiles or shingles. They constitute about 47.30 per cent in the urban areas of this district. . . . Corrugated iron, zinc or other metal sheets have been used as a material for roof to cover the houses of about 13.42 per cent in the rural areas of the district. Such houses account for 8.52 per cent in the urban areas. . . .Every fourth house in the towns of Hooghly is seen to be roofed with brick and lime. These materials have seldom been used in the rural areas of the district, where such type of houses account for only 4.87 per cent of the total houses. Quite a number of houses are found in the urban tract having been roofed by concrete or stone slabs. Houses of such type account for 11.65 per cent of

the total urban houses in the district. In the rural areas this percentage is only 2.8. . . .

Density of houses

"The houses in this district are not widely scattered, rather, it may be said that houses are quite congregated here. The density of census houses for the district as a whole is about 603 census houses per square mile. In the rural areas of the district 496 census houses are found to be standing on each square mile on an average as compared to 3,464 houses in the urban areas of the district. In the industrialized subdivision of Serampore the density of census houses is higher than the district average. In the rural areas of this subdivision 635 houses on an average are found to be occupying one square mile of area. Each square mile of this subdivision's urban area has on an average about 5,289 census houses. In the rural areas of the Arambagh subdivision the density of census houses is also quite high (540 census houses per sq. mile). In Arambagh town, houses are quite sparsely scattered where the density of census houses is only 907. . . .In the urban strip along the river Hooghly more than 4,500 houses are found to be standing on one sq. mile of area on an average. In the rural portions of these police stations lying on the river Hooghly this density is found to be 562."

Settlement pattern

The changing of the courses of rivers and their influence on the settlement landscape of the district have already been discussed in Chapter I. Linear settlements once flourished along the courses of the derelict rivers, the river-fronts being generally occupied by higher and more affluent castes while the inferior castes lived at a distance in isolated homesteads and dispersed clusters. Examples of such settlements may be seen in Jangipara, Krishnanagar, Gobindapur, Prasadpur, Kotalpur and Jhingra along the courses of the Kana Damodar and the Kunti; Khanakul, Anantanagar, Kamarhati, Senhati, Rajhati, Barbari Nandanpur, Bonhijli, Sundarpur and Markhana along the Kana Nadi and villages along the courses of the Kana Dwarakeswar and the Saraswati, including Chanditala which has outgrown its former shape. Villages along active channels like the Damodar (Jangalpara, Srirampur, Balarampur, Teghari, and Chanpadanga), the Dwarakeswar (Dewanganj, Bara Dongal, Basantsati, Brindabanpur, Hat Basantapur, Rasulpur and Hayatpur) and the Bhagirathi still retain the characteristics of linear settlements.

Amorphous rectangular settlements, with one or two main thoroughfares running along their lengths and houses of wealthy upper castes converging near the prime source of water or the main road, are the other prevalent settlement types in Hooghly. Dispersed settlements, with the houses of the well-off around the market place, a temple or a mosque, are found on higher ground away from rivers. Such habitation patterns are found in the northern and western police stations of the district (Survey of India Topo-Sheets No. 73N/9, 79A/8 and 73N/13). The principal towns of the district lying between the

Bhagirathi and the Eastern Railway main line also display a linear arrangement of houses flanking the arterial Grand Trunk Road running parallel to the river.

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CHAPTER IV

AGRICULTURE AND IRRIGATION

LAND RECLAMATION AND UTILIZATION

According to the Census of 1961, amongst every thousand of the working population of Hooghly district, 303 persons were cultivators and 197 agricultural labourers. In spite of the fact that Hooghly is one of the most important industrial districts of West Bengal with numerous factories flanking the Bhagirathi, it still retains, as a whole, its basic rural character since no less than 50 per cent of its total working population depends solely on agriculture.

Cultivable waste

According to the settlement records of 1930-37, the total area of the district was 7,73,363.8 acres, of which cultivated land consisted of 5,46,175 acres, current fallows 19,947.6 acres, culturable area other than current fallows 69,510.2 acres and the area not available for cultivation 1,37,731 acres. "Excluding the area not available for cultivation consisting of homestead sites, roads, rivers and unculturable areas, the balance of the area available for cultivation comes to 6,35,632.8 acres. Of this total area available for cultivation, 89.1 per cent consisting of cultivated and current fallow is usually under the plough, of which again 3.2 per cent is current fallow. Of the area actually under cultivation, the area yielding one crop forms 87.5 per cent and 12.5 per cent of the area yields a second crop."[1]

Against this background obtaining in 1930-37, the following table gives an idea of land utilization in the district during 1960-63.

LAND UTILIZATION IN HOOGHLY DISTRICT[2]

(Acreage in thousand acres)

	1960-61	1961-62	1962-63
Total area of the district	775.7	775.7	775.7
Area under forest	0.6	0.6	0.6
Area not available for cultivation	154.5	154.6	154.6
Other uncultivated land excluding current fallow	24.5	22.8	23.3
Current fallow	7.5	5.0	6.4
Net area sown	588.6	592.7	590.8
Area sown more than once	101.8	121.4	118.0
Total cropped area	690.4	714.1	708.8

It will be seen from the foregoing table that in 1962-63 current fallow comprised only 0.82 per cent and cultivated land excluding current fallow 3.00 per cent of the total area of the district. In other words, practically all the cultivable land in the district had already come under the plough leaving little scope for further extension of agriculture in the district. In the same year the area sown more than once accounted for 17.30 per cent of the net area sown while in 1961-

SOIL MAP
HOOGHLY DISTRICT
Scale
Miles
Kilometres
BURDWAN
BANKURA
MIDNAPORE
HOWRAH
24 PARGANAS
Bhagirathi R.
Damodar R.
INDEX
SOIL TYPES BY TEXTURE
Clay
Clayloam
Sandy Clayloam
Siltyloam
Sandy Clay
Sandyloam
Loamy Sand
Sand
Loam
Sand Quarry

62 and 1962-63 the corresponding percentages were 20.48 and 19.97 respectively. The following extract from the Settlement Report of 1930-37 is relevant here: "The examination of the statistics relating to the employment of land brings out the fact very clearly that there is little margin left for extension of cultivation in this district. The continuous increase in the pressure on land brought about by the large increases in population which are revealed at every census can be abated only by more intensive cultivation of the existing areas, by taking advantage of the results of agricultural research, by the use of chemical manures and by judicious selection of seeds. The produce of the land will have to be increased by growing more crop per acre than is grown at present and by getting two crops out of lands which at present bear a single crop."[3]

This suggestion for intensive cultivation has received pointed attention in the post-Independence days. Whereas in 1947-48 only 5.21 per cent of the net area sown yielded a second crop, in 1951-52 the proportion rose to 8.20 and in 1956-57 to 10.31. There was a very significant increase in intensive cultivation in the district by 1960-61 when the percentage of area sown more than once to the net area sown stood at 17.3 while the corresponding percentage figures for the two succeeding years were 20.49 and 19.98 respectively.

The general characteristics which distinguish agricultural conditions in the deltaic plains of Bengal are all markedly present in the Hooghly district. In O'Malley's words: "The rainfall is regular and copious, the soil is fertile, and it is periodically enriched by fresh deposits of silt from the overflow of rivers. The latter are constantly carrying on the work of erosion and accretion, of soil denudation and formation, but the process of soil formation is the more active of the two."[4] The big rivers are busy throwing up *chars*, year after year, either in their beds or along the banks—a process of land formation best seen in Hooghly. The work of alluvion and diluvion goes on chiefly at the river bends or at the confluence with other streams. These accretions, being renovated annually by fresh deposits of silt, grow splendid *rabi* crops, tobacco and vegetables.

Clearing of forests and recovery of swamps

There are no extensive forests in the district; the small patches here and there cover in all a total area of 730.56 acres only. The forest areas do not, therefore, offer any scope for extension of cultivation through their planned clearing. But there is considerable scope for recovery of swamps for increasing the acreage of culturable lands. Most of these marshes are to be found in Pandua, Polba, Chanditala, Jangipara, Uttarpara, Pursura and Khanakul police stations and some of them are of considerable size, e.g. the Khanyan marsh between the old silted-up channels of the Damodar in Pandua P.S., the swamp between the Ghia and the Kana Nadi, the Dankuni marsh lying between the Saraswati and the Bhagirathi, the marsh between the Damodar Khal and the Kana Dwarakeswar in Khanakul

P.S., the Kumirmora Bil lying to the west of the light railway line between Kalachhara and Jangalpara railway stations, the southern Khanakul marsh below the confluence of the Chaubis Bigha Khal and the Kata Khal at Baligari and the Sultanpur Bil at the confluence of the Amodar and the Tarajuli.

The most important reclamation works for utilizing these marshy areas for cultivation relate to the drainage of the Dankuni marsh in Chanditala P.S. and the Rajpur swamp in Jangipara P.S. Details of these reclamation schemes have been given in the section on 'River System and Water Resources' in Chapter I and need not be repeated here.

Soil erosion and reclamation through afforestation etc.

In the Goghat police station, the soil, bare of plant cover and with a loose and thin surface layer overlying a heavy subsoil of low permeability, has a tendency of suffering from sheet erosion* by rain-water accompanied by some amount of rill erosion and gully-erosion.† The other areas of the district comprise a monotonously flat plain and the nature of the soil is also different. This alluvial zone with levelled paddy fields has a low, almost imperceptible, gradient. This makes the soil immune from the agencies of erosion, in spite of a heavy rainfall and moderate run-off. The menace, nonetheless, affects the district indirectly. The tremendous loss of soil in the upper catchment areas of the Damodar and the Dwarakeswar is reflected in the heavy silting of the river beds, overflooding of embankments, frequent change of river courses, total blockade of drainage systems giving rise to swamps and marshes and frequent submergence of low-lying riverine tracts. Except for small areas in the Arambagh subdivision, there is no mentionable forest elsewhere in the district. As has been stated in Chapter I, the Mundeswari basin suffers from a want of forest cover.** A top dressing of sand rather than erosion of the soil is the main problem in the Damodar basin where the friable banks give way during floods and the escaping sands spread over vast areas rendering cultivable land sterile. The

* Though often inconspicuous, sheet erosion is the most insidious type of soil erosion resulting in the gradual removal of the humus-charged surface layer and exposure of relatively infertile subsoil strata, accompanied by a gradual fall in the yield.

† Sheet erosion merges imperceptibly into rill erosion, the ultimate stage of which is the development of gullies. Rill erosion represents an intermediate state between sheet erosion and gullying. In rill erosion the run-off water tends to concentrate in thin rivulets which, in turn, tend to converge on larger channels and ditches over the whole area, often attaining a dendritic pattern of streamflow. When rill erosion reaches an advanced stage, the increasing volume and velocity of water discharging through the rill channels cut deep incisions or gullies.

** The study of the rate of soil erosion in different parts of the district has not been undertaken but it is known that in the formative period of the soil under the protective cover of virgin forests and grasses the resistance to erosion exceeds the erosive force of water. In general, the rate of soil erosion can be broadly taken to be a function of the amount and velocity of surface run-off, considered in relation to certain physico-chemical properties inherent in the soil together with the degree of friction offered by the vegetal covering over the land.

flood-plain scour-routes in other parts of the district indicate that more effective measures to check soil erosion through planned afforestation is necessary. Protection of the embankments also calls for afforestation schemes. Cart roads, again, running mostly athwart the natural gradients, have carved deep tracks through which water rushes down during a heavy downpour and erodes the top soil. The eroded material brought down from the peninsular region is sometimes very rich, but the benefit is frequently offset by drainage dislocations due to heavy floods. Incompetent embanking and river training as also the numerous culverts on roads and railways have added to the problem.[5] Some afforestation schemes have been implemented in the district during the Second and the Third Plan periods and a total area of about 100 acres has been covered. As there are no large forests in the district, it is rather difficult to combat the soil erosion problem effectively. The Forest Department and the Department of Agriculture and Community Development are yet to evolve schemes for tackling the problem.

IRRIGATION

Irrigation facilities: rivers

The river system of the district consists mainly of three large streams, namely the Bhagirathi, the Damodar and the Dwarakeswar and their numerous distributaries. There are also minor rivulets and village channels draining the respective localities in the rains but these mostly dry up during the rest of the year. A detailed account of all the live and derelict rivers of the district which deserve any mention, their past and present courses, their water potential during various seasons of the year, the areas through which they flow and the floods caused by them from time to time has already been given in the section entitled 'River System and Water Resources' in Chapter I and is not repeated here. Suffice it to say for the purposes of the present chapter that although small streams are occasionally dammed up for watering neighbouring fields, for instance in the Khanakul P.S., little use is generally made of the bigger rivers for agricultural ends as their banks are usually too high to make such utilization economical. Limited facilities, however, exist for lift irrigation which are described later in this chapter.

D.V.C. canals

The area covered by the canals network of the Damodar Valley Corporation spreads over 12 thanas of the district and comprises more than 1,458 villages. Besides, the Kangsabati Project commands a total area of 46,800 acres located within the police stations of Goghat and Arambagh. This latter project, when completed, will actually benefit about 37,505 acres.[6] The D.V.C. canals run for a total length of 250 miles within the district and operate in the thanas Pandua, Dhaniakhali, Polba, Haripal, Tarakeswar, Jangipara, Chanditala, Singur, Magra, Balagarh, Chinsura and Bhadrewar. The progressive increase in the net area irrigated by the D.V.C. will be apparent from the fact that it was 78,000 acres in 1960-61, 94,000

acres in 1961-62, 1,25,221 acres in 1962-63, 1,34,631 acres in 1963-64, 1,39,879 acres in 1964-65 and 1,42,982 acres in 1965-66.[7]

In artificial irrigation, some of the benefits begin to be derived immediately after the canals start supplying water to the fields but others may take a longer time to accrue. "It has been held that the benefits of a major irrigation system may take 25 years to attain their peak. In estimating the benefits, therefore, it is necessary to make two independent measurements—one for the short period and another for the long period. After a canal starts supplying water, it requires a certain time for the tract affected to adapt itself to new conditions. Roughly speaking, most of the primary benefits would begin to flow fairly fully at the end of five years after completion of the project. . . .In the period that follows, primary benefits will attain their peak and secondary and tertiary benefits will appear progressively and the whole system will reach its maturity at the end of 25 years."[8]

Before the inception of the D.V.C., two major canal systems used to supply irrigation water to a part of its present command area. The Eden Canal, the older of the two, came into existence in 1881 as a sanitary canal to flush river beds and to supply drinking water. Later on it was found that it could also serve irrigational purposes. The Damodar Canal was constructed between 1926 and 1933 and put into operation in 1933. Both the Damodar Canal and the Eden Canal systems have now merged with the D.V.C. irrigation network. The D.V.C. has also renovated the channels of the Saraswati and the Ghia, remodelled some of the branches and distributaries of the old canal systems and linked up the old beds of the Kana Damodar, the Kana Nadi and the Kausiki through the construction of numerous channels and distributaries.

The irrigation facilities provided by the D.V.C. are supplemented by tanks and deep tube-wells. Well irrigation is not practised in the district and the farmers do not like it. The statement below shows the net area in the district under irrigation (from all sources) from 1960-61 to 1965-66.

Year	Net area irrigated (in acres)	Percentage of net irrigated area to the net area sown	Area irrigated more than once in the same year (in acres)	Gross irrigated area (in acres)	Percentage of gross irrigated area to total area under crops
1960-61	70,000	13	8,053	78,053	14 6
1961-62	85,400	16	9,489	98,889	18.0
1962-63	1,15,821	21.7	10,840	1,26,621	23.7
1963-64	1,18,653	22	17,726	1,36,378	25.5
1964-65	1,22,300	23	19,933	1,42,233	26.6
1965-66	1,20,705	22.6	25,051	1,45,756	27.4

The above statement makes it clear that with a significant increase in the net irrigated area between 1960 and 1966 the area irrigated

more than once as also the area under crops have increased very substantially.

Crops grown

The major crops grown in the D.V.C. command area within the district are *āman* and *āus* paddy, jute and potato. Minor crops include pulses like *mug*, *khesāri*, *kalāi*, gram and peas; oilseeds like *til*, *rerhi* and sesamum; vegetables like radish, tomatoes, brinjals, gourds, cabbages, cauliflowers and fruits like bananas, mangoes, etc. The crops may be broadly classified into two groups—*kharif* and *rabi*. The former is sown in the summer and rainy seasons while the latter is sown in autumn. Canal water supplied in the newly-irrigated villages is meant chiefly for *kharif* cultivation.

There is some inherent time lag for canal water to reach all fields in the new zones. The main reason for this is the inconvenient configuration of the irrigable plots. In a recent survey it was found that the time lag was external to the cultivator and was usually connected with some physical or objective difficulty. There was complaint from the villagers that choice of canal lanes had not been wisely made in some cases. The illegal obstruction of water midway between the canals and the fields is another important cause of such irregularity.

Minor irrigation

The minor irrigation projects in the district may be classified into (i) deep tube-well irrigation, (ii) river pump lift irrigation, (iii) small irrigation schemes and (iv) tank irrigation.

Deep tube-well irrigation

Deep tube-well irrigation has been found useful in areas not served by the river valley projects. The following table furnishes details of such irrigational facilities available in the district in 1964-65.

Development Block where sunk	No. of deep tube-wells	Gross area irrigated (in acres)		
		Rabi	*Kharif*	Total
Balagarh	40	200	200	400
Chinsura-Magra	11	200	200	400
Pandua	3	..	—	—
Singur	3		—	—
Pursura	11	600	600	1,200
Arambagh	28	500	500	1,000
Goghat	7	500	500	1,000
Khanakul I & II	14	—	..	—

A deep tube-well is expected to supply water to at least 200 acres of cultivated land. The relatively small acreage of irrigated land in the above table is explained by the fact that many of the deep tube-wells, although sunk, could not be electrically energized by 1964-65. This necessary time lag between drilling and energizing was perhaps unavoidable in the initial stages. Water-rates in the areas irrigated by deep tube-wells have been fixed on a 50 per cent subsidy basis. It has been proposed to levy a flat rate of Rs. 11 per acre on all lands lying within a tube-well command and to charge Rs. 15 per acre for actual supply of water. Pending necessary statutory enactment in this behalf, water-rate is now being realized at the rate of Rs. 10

per acre for *kharif* crops, Rs. 15 per acre for *rabi* crops and Rs. 10 per acre for intermediary crops after free supply of water for a year. Deep tube-well irrigation has the additional advantage of growing double or even triple crops in the command area as the water supply is available throughout the year.

River lift irrigation

Under the river lift irrigation system, power pumps are used to lift river water on to the adjoining fields. Two such schemes were in operation in the district in 1965-66. In the same year 42 pumping plants were distributed amongst cultivators at an estimated expenditure of Rs. 90,275.

Small irrigation schemes

Small irrigation schemes envisage improving of existing shallow wells, digging of fresh surface wells, excavation of irrigation and drainage channels, throwing up of catchment bunds and construction of sluice gates etc. The beneficiaries are to conbtribute 50 per cent of the total estimated costs. In 1963-64 a sum of Rs. 3,14,038 was sanctioned for all types of small irrigation schemes in the district but the actual expenditure was only Rs. 90,048. In 1964-65 the expenditure was Rs. 1,10,912 against a sanctioned amount of Rs. 3,50,000. In 1965-66 the amount sanctioned remained the same but the actual expenditure rose further to Rs. 1,18,777. These figures prove the growing popularity of such irrigation schemes in the district.

Tank irrigation

Before the inception of the D.V.C., irrigation in the district depended to a fair extent on the numerous tanks and *jheels* dotting the countryside. The Tanks Improvement Act came into force in August 1944 with a view to resuscitating derelict tanks and drawing water from them for irrigating the neighbouring fields either through the 'gravity' method or the 'lift' system. In the former case, a cut is made in the bank of the tank situated on higher ground so that its water, aided by gravity, pours out on surrounding lands. Under the other system, which is more extensively practised in the district, water is lifted, occasionally in several stages, by means of canoe-shaped troughs called *dūni* or *sini* from the lower levels of the tanks or rivers on to the adjacent fields.

There were some 24,109 tanks in the district in 1960-61. During the First Plan period 102 tanks were improved at an expenditure of Rs. 5,05,031 benefiting an area of 3,801 acres. Because of a Government directive that no tanks in the D.V.C. and the Kangsabati command areas should normally be taken up for resuscitation, there was an appreciable fall in the tank improvement work in the district and the number of tanks re-excavated during the Second Plan period was only 19 and the area covered a paltry 465 acres. During the Third Plan period, the position looked up a little but not quite sufficiently inasmuch as only 59 tanks were improved benefiting an area of 1,551 acres at a total cost of Rs. 2,07,094.

Recent surveys show that tank irrigation improves paddy yields by about 3 maunds per acre and that approximately 25 per cent of the

lands enjoying such facilities grow a second crop. Pressing food problems prompted the State Government to take a decision in 1964-65 that tank improvement work should be maximized for which the execution of individual schemes should be entrusted to the local panchayats. Although no tank was improved by the Anchal Panchayats in 1964-65 and 1965-66, a total of 113 of them was selected by such bodies during these years for improvement at a later stage.

AGRICULTURE INCLUDING HORTICULTURE

Nature and variety of soils

Influence of hydro-geology, climate and topography has operated, as elsewhere, in the formation of soils of the district. Two types of parent materials are involved which are brought under the fundamental pedogenic processes of eluviation and illuviation (i.e. leaching and deposition). The effect of topography is either to accelerate or to retard the pedogenic processes. In the low lands, where the water-table is very near the surface and fluctuate with the seasons, typical hydromorphic soils (bog, peat or meadow soils etc.) are met with. Their reclamation through appropriate hydro-technical measures can bring under the plough extremely rich 'humus soils'. On the other hand, the flat alluvial tracts, under normal conditions, allow both mechanical and chemical eluviation of the surface horizons and in the deposition of $CaCO_3$ and sesquioxides in the subsoil horizons. Faulty irrigation and want of drainage have caused some of these soils to become waterlogged and saline. The upland soils undergo, in course of time, an azonal to zonal transformation.* For example, varieties of tropical red soil are come across on the alluvial terraces (see Chapter I). The old alluvium, representing the uplands, also display similar changes. Intensive surface irrigation has led to a worsening of the structure of surface horizons, i.e. to a loss of fertility due to the washing down of soil nutrients by percolating water in some of these soils.

Towards the western borders of the district, the Damodar group of rivers is depositing colluvial materials which form only a thin veneer on the underlying alluvial surface. In the more westerly parts, where lateritic sands and gravels occur, the soil has formed directly from the subjacent rocks. The soils of the low-lying areas in the marshes of the Hooghly-Rupnarayan doab and along the dying rivers are generally of fine to moderately fine texture The natural consequence of the open texture of the soils of these low lands is that their water holding capacity is below the normal requirement of the cultivated crops. This explains the need for having drainage and irrigational facilities for the development of agriculture in this area. To put all the irrigational canals in good use throughout the year, adequate supply of water in the main canals should be main-

* Different types of loamy soils are azonal in character with little or no profile development; saline and swamped soils are intra-zonal and soils formed on old alluvium are zonal.

tained, which again is difficult to achieve in a flat plain susceptible to sudden floods. Though liming is necessary, care must be taken in the use of ammonium sulphate for increasing crop yield in those areas where the surface soil is acid, i.e. where pH values are high. It may be observed that coarse-textured soils are only found in areas where sand has been deposited. Putting up forest shelter belts in these regions and arresting the annual sand deposition of fertile tracts is of great importance from the ameliorative point of view. For raising the effective and potential fertility, radical improvements are necessary especially for alluvial soils which are very poor in phosphate, nitrogen and phosphorus. Some lands which have become saline (as in the Hooghly-Rupnarayan doab) may be reclaimed by systematic irrigation.[9] Happily, the agriculturists of this district are progressively becoming less dependent on the small mercies of nature and are engaging themselves more and more with the transformation of the soil through scientific farm management.

Suitablility of various soils for cultivation of different crops

For planning land utilization, the Directorate of Agriculture, Government of West Bengal, recently carried out a systematic study of the genesis and constitution of different types of soil occurring in the district.[10] This pedological investigation was based on Kellog's method[11] as suggested by the Indian Council of Agricultural Research[12] and is popularly known as the 'Reconnaissance Soil Survey' under 'Stewart's Scheme (1952-56)'. By examining the morphology of soil, as expressed in its profile at every six miles (or even lesser distances where change in soil type was observed), a soil map classifying the district into a number of series, associations and types was prepared. The soils were first divided into red and alluvium groups and the alluvial soils were further divided into two families, namely the Ganga alluvium and the Damodar alluvium. Soils of each family were further classified into the following associations:*(i) Ganga Riverine, (ii) Ganga Flat Lands, (iii) Ganga Low Lands, (iv) Damodar Riverine, (v) Damodar Flat Lands and (vi) Damodar Uplands. Potentialities of different areas for increased crop production through manuring were estimated by undertaking simple manurial tests for three seasons in selected fields all over the district.[13] The erosion characteristics and soil qualities revealed by this investigation provide data for reclamation of (flood-borne) sand-damaged areas. Irrigation ratings of soils and the drainage requirements of some tracts were also studied in course of these operations.[14] Briefly, the findings pointed out that many of the so-called fertile soils were not productive as their inherent fertility was not harnessed in many cases to the point of optimum productivity by a proper management of the soil and crops. As regards the different types of soil, the findings

* Even within these associations there are diversities of mechanical and chemical composition, drainage conditions and system of soil management which, cumulatively, account for local differences.

were as below. Red Soils: these occupy a small area in the western half of the Goghat police station. They are mildly acidic, poor in calcium, nitrogen and phosphorus, light in texture and porous. They respond well to irrigation and produce a good crop of winter paddy, sugarcane, wheat, gram etc. with a moderate application of phosphatic and nitrogenous fertilizers. If monsoon fails, the crop suffers badly.

Ganga Riverine Soils: these occur in the northern and eastern parts of Balagarh and in the eastern parts of Polba and Chinsura police stations and are divided into two phases—inundated (young) and highland (early maturity stage). In its inundated phase the water-table is very high and the profile development shallow and immature. These characteristics are noticed in the *char* lands adjacent to the Bhagirathi, the Saraswati, the Behula and the Kunti which remain submerged during the rains and the annual deposition of silt keeps up their fertility. Wherever such silt deposits occur, the cultivation of early *āus* (autumn rice), water-melon and *paṭal* (*Trichosanthes dioica*) thrives without irrigation. The average yield of jute grown in the inundated phase of the Ganga riverine lands is higher than the district average. In the highland phase, the Ganga riverine soils are of brownish colour due to soil wash, hydrolysis and oxidation and the subsoil is usually composed of sand which is grey to greyish-white in colour. Such soils occur in the old and comparatively higher river banks and support a variety of riparian crops.

Ganga Flat Lands: these soils, occurring in the eastern part of Jangipara, north-western part of Chanditala and central part of Balagarh police stations, display a slightly immature profile. Here some illuviation of clay has taken place at the lower layers and the subsoil is getting enriched at the expense of moderate leaching of the top soil. The soil types vary from clay to sand depending upon the difference in micro-topography and at places they are calcareous. The tracts situated in Chanditala and Jangipara thanas present problems of waterlogging resulting in an average out-turn of only 24.77 maunds of rice and 35.96 maunds of straw per acre. Application of nitrogenous and phosphatic manures is needed for effecting optimum production and the out-turn of jute from such soils can also be increased by almost four maunds per acre with nitrogenous fertilizers.

Ganga Low Lands: these soils occur in the south-eastern parts of Haripal, Singur and Chanditala police stations and are characterized by profiles having clay at the top and light subsoils which occasionally consist of 'riverborne loess' or coarse sand with calcium carbonate concretions. The profile development closely resembles lacustrine deposits. These lands present maximum irrigational difficulties inasmuch as the region comprises abandoned river beds and silted up Bils and gets inundated during the rains. The subsoil generally consists of silty clay (deposited mostly by tides) and has a good

percentage of sodium saturation in exchange complex. Utmost care, therefore, should be taken so that the subsoil water may not get the upper hand and relapse the area back to reeds and marshy vegetation from which it has been reclaimed for cultivation. The average production of rice in this tract is 26.57 maunds of grains and 42.02 maunds of straw per acre which is higher than the district average. This yield could be increased by 3.46 maunds of grains and 12.13 maunds of straw per acre by applying only nitrogen. Additional manuring through phosphatic fertilizers could increase the yield still further. Phosphates may also augment the out-turn of jute, which, in this locality, yields 17.30 maunds of dry fibre per acre which is higher than the district average.

Damodar Riverine Soils: this association occurs in the south-east, east and north-east parts of Goghat P.S., in the whole of Arambagh thana except some patches to the north and in the south-east corner, in Khanakul police station except in its north-west corner, in Pursura, in Tarakeswar, in Dhaniakhali, except its south-eastern part, in the central and north-western portions of Jangipara, in the south-west and the north-west of Haripal, in the northern part of Singur, in the south-eastern and north-eastern parts of Polba and in the police station of Pandua, except some spots in the south. The soil displays an immature profile development with irregular sequence of sandy layers which are, very often, coarse and yellowish brown in colour. These tracts had an inundated phase leading to the development of large swamps at places or the deposit of laminae of sandy top-soils along the braided river channels. Such soils occurring on the east of the Damodar are now fed by canals in addition to the traditional system of lift irrigation. Where the subsoil is black clay, having 30 per cent or more of sodium in its exchange complex, a danger limit appears from the irrigational point of view. Fortunately, this layer occurs much below the water table. Where the subsoil is coarse sand, irrigation water may find an easy way into it through permeable layers and raise the water table. Since the profile examined all over the area are salt-free, there is not much apprehension of injurious salt efflorescence. But damming of water courses for *rabi* irrigation has the baneful effect of raising river beds and also restricting subsoil drainage. Potato is one of the richest cash crops in these areas, where paddy yield averages 25.61 maunds of grains and 44.36 maunds of straw and jute 15.79 maunds of dry fibre per acre. Application of nitrogen and phosphate in these soils has led to higher yields.

Damodar Flat Lands: this soil association occupies almost a flat topography and is now out of reach of floods from which the Damodar riverine lands suffer. It occurs in the west, north-west, and south-western parts of Goghat P.S., in the south-western parts of Arambagh thana, north-western parts of Khanakul, western

half of Jangipara, south-western section of Dhaniakhali, north-eastern corner of Haripal, in a small part of Singur, in the west-central and north-western parts of Polba, northern parts of Magra, south-western parts of Balagarh and in the southern portion of Pandua police stations. Distinct soil horizons are not found in these soils, although the soil profile displays distinguishable layers by their colour, moisture contents and other physical characteristics. There is very slight illuviation of sesquioxides in the lower layers. Calcium, potassium and clay indicate that a process of leaching has started, and as a result of all these, the surface has turned slightly acid. There are occasional dolomitic concretions of fairly big sizes occurring at random in the profile. The manner of distribution of these concretions indicate that these are flood-borne deposits and have not formed *in situ*. Brown iron concretions also occur in lower layers which do not effervesce with hydrogen peroxide indicating absence of manganese. In the trans-Damodar area which is beyond the canal-commanded zone, such soils range from clay-loam, sandy-clay-loam to loamy sands and sand. Absence of any layer with sodium, presence of soils having calcium in the exchange complex, leaching and moderate permeability, a heavy subsoil which is neutral in reaction--these are the chief characteristics which have to be taken into account in introducing a system of canal irrigation in this area. Leaching by irrigation water reduce the low calcium status resulting in greater acidity. The average yield of paddy in this area is 23.19 maunds of grain and 39.20 maunds of straw while jute accounts for 12.88 maunds of dry fibre per acre, all of which are definitely below the district averages. Application of phosphate with nitrogen in the case of grains and potash with nitrogen in the case of jute is necessary to ensure optimum production.

The Damodar Uplands: this association occurs in a limited area in the extreme north of Arambagh police station. Here the soils have mature profiles. Illuviation of clay, sesquioxide and calcium have taken place. Mottlings are present. Dolomite concretions occur, often in thick layers. The average yield of jute is 15 maunds per acre which is equal to the district average. Application of nitrogen was seen to increase the yield by 4 maunds and of potash by another 2.5 maunds. The morphology, physico-chemical properties and the situation of the soil show that the problems of salinization, raising of water table and formation of swamps may not be serious problems affecting it. It is mildly acidic, partially unsaturated, and has, therefore, a tendency to be washed away by surface currents leading to sheet erosion. This displacement of top soil from the cultivated fields may result in loss of fertility necessitating flood protection and conservation measures.

Cropping pattern

Rice is the principal crop of the district and the three varieties, *āman*, *āus* and *bôrô* are grown. Other cereals include wheat, barley

and maize. Pulses like *masur*, *mug*, gram, *māshkalāi*, *khesāri* and *arahar* and oilseeds like mustard and sesamum are also produced in substantial quantities. Jute, potato and sugarcane are the principal cash crops. Among subsidiary cash crops, mention may be made of vegetables, chillis, onions, garlics, sunhemp and tobacco. Fruits include bananas, mangoes, coconuts etc. The following table gives the distribution of general crops in the district in 1960-61.[15]

Crops	Area in acres
Total rice	4,86,343
(a) *Āman*	4,48,552
(b) *Āus*	29,887
(c) *Bôrō*	7,904
Wheat	741
Gram	4,446
Other foodgrains	64,714
Sugarcane	4,199
Rape or Mustard	2,717
Til or Sesamum	247
Condiments & Spices	247
Jute	58,786
Fruits and vegetables (including root crops)	59,280

Rice

"*Aus* is grown in high lands where water does not generally accumulate during the rains and it produces coarse grains. There are two management practices of growing *aus*. It is broadcast as well as transplanted. The broadcast *aus* is grown in soils which get drained very easily, whereas the transplanted one under more restricted drainage. Weeding in the broadcast *aus* fields and aeration of the fields by cultural operations makes growing of broadcast *aus* more expensive. But since these lands do not hold water sufficient for transplanting purpose, the method of broadcasting is adopted. It has also the advantage that cultivation of both *rabi* and *kharif* can be commenced earlier. Broadcasting *aus* in lines is being experimented upon as a possible measure to make the weeding and cultural operations of *aus* easier and if good results are obtained the problem may be partially solved."[16]

Āman, the principal rice crop, is sown in May and June, transplanted on the onset of the rains, and harvested, on high lands, between November and January, and on lower grounds, by February. The principal varieties of fine *āman* rice are *Rupsāl*, *Sītāsāl*, *Dudhkalmā*, *Kanakchur*, *Sāban*, *Dādkhāni*, *Rāmsāl* and *Gôbindabhôg*. Other types yielding medium quality rice are *Nekrāsāl*, *Nonā*, *Dudhenonā*, *Jaṭākalmā*, *Dhubkalmā* and *Sindurmukhi*. *Harkuṭi*, *Latāsāl* and *Jhiṅgāsāl* constitute the coarser varieties. In recent years, the finer stuff is being gradually replaced by coarser varieties.

Bôrô is the marsh rice transplanted in winter and harvested in spring. It ordinarily grows along the banks of marshes or in very low lands which remain wet till the advent of summer. Ploughing

is not required when the soil is of soft mud, otherwise a nominal ploughing is needed.

Pulses

Next to rice, pulses are the most important foodgrains. Gram is grown on a limited area but *masur*, *mug*, *khesāri* and *māshkalāi* are the most favoured pulses. *Khesāri* is "sown broadcast in October, grows slowly until the winter rice is harvested, then shoots up rapidly and is gathered in February and March. It costs little to cultivate, but the yield is not large if the rice crop is good. It is a grain which, owing to its cheapness, is much used in the form of pulses by the poorer classes while the straw is an excellent fodder for cattle. The other pulses form the main cold-weather crops of *sunā* lands. They are sown in October and November after ploughing and are reaped in February and March. The ploughing is more carefully done, the seeds cost more and the outturn is more valuable, furnishing the *dāl* eaten by the higher classes."[17]

Oilseeds

Oilseeds, such as sesamum, rape and mustard are cold-weather crops grown in small plots on high lands round the villages and on river *chars* which are periodically fertilized by new silt. The acreage under them is low although mustard oil happens to be the universal cooking medium of the Bengalis. Following the recent grave difficulties faced by the West Bengal millowners in obtaining regular supplies of mustard seeds at economic prices from the growers in northern India, attempts are being made, in the district as also elsewhere, to increase the cultivation of mustard seeds.

Jute

Jute occupies the next largest acreage after rice and is the most important cash crop of the district. With the partition of the country in 1947, the main jute belt of undivided Bengal went to East Pakistan while the manufacturing industry remained within the Indian Union. This imbalance has since been largely overcome by expanding the cultivation of jute in the West Bengal districts (as also elsewhere in the country) and the Hooghly district plays an important role in this bid to self-sufficiency which is instrumental in earning substantial foreign exchange for India.

After the first showers in May, *sunā* land, on which jute is usually grown, is ploughed and the seed sown at the rate of about 6 kilograms per acre. The fields are then weeded twice or thrice before the onset of the monsoons. In August and September the stalks are cut, stripped of their leaves, steeped in bundles in some pool or stream and retted there for several days. When the fleshy parts of the stems reach a suitable stage of decomposition, they are taken out and beaten so as to extract the fibre. The fibre is then cleaned, dried by hanging and are made up into bundles ready for the market, the dry stalks being used as fuel, for thatching, or for fencing betel-leaf plantations. Jute-*āman* paddy-jute is a rotation followed in the district wherever possible. According to expert opinion, there is scope for bringing more *āman* lands under a prior jute crop and this rotation, if adopted

on a wide scale, may substantially increase jute production without affecting *āman* yields. Next to Murshidabad and 24-Parganas (in that order), Hooghly occupies the third place in point of production of jute in the State. In 1960-61, this district shared 8.16 per cent of the acreage and 11.15 per cent of the total quantity of jute produced in West Bengal.

Potato

The fairly extensive area in which potato is grown in the district lies mainly along the Saraswati, Behula, Kana Damodar and other small rivers, the chief concentrations being in the Singur, Haripal and Tarakeswar police stations. With increased facilities of perennial irrigation from the D.V.C. canals, the entire Damodar riverine area and a portion of the flat lands having higher surface soils is expected to take up jute-potato or jute-potato-onions rotations in the near future. The varieties grown include the *desi* or indigenous, the Rangoon and the Nainital. But the State Agriculture Department has been experiencing difficulties since 1964-65 in arranging imports of seeds of the Rangoon variety on account of foreign exchange restrictions. The *desi* variety is also losing ground because of its lower yield.

Potato is usually cultivated on high lands having facilities of irrigation. To start with, the field is ploughed twice in the months of Bhadra and Aswin (September-October) and is then levelled with a *moi* or harrow, manures like ammonium sulphate and oilcake being mixed with the soil at the same time. The process of ploughing and levelling continues until all clods are broken up and the soil becomes powdery. The land is also made entirely free of roots of weeds and other plants. A few linear depressions are then made across the field so as to permit the irrigation water to flow along them. The seeds are received by the cultivators from cold storages situated at various places in the district. "Those of the seeds which are big, are cut up into pieces, there being as many pieces as there are eyes on the potato. The eyes are planted in rows in the field. Slight water is applied as soon as it is seen that the seeds are germinating. The field is irrigated once every week, but the water is not directly applied at the plants but along the channels parallel to the rows in which the seeds have been planted. As the plants grow, earth is piled up on the roots to ensure that all the potatoes, which sprout from the roots, remain underground. . . .The potato plants wither away in the months of Magh-Phalgun (January-March). The potatoes are then dug out with the help of *kodals* or spades. The average yield per bigha is between 50 and 60 maunds."[16]

The harvesting of potato extends from November to March and the normal period of greatest supply on the market continues from January to June. The important potato marts in the Hooghly district are at Sheoraphuli, Chanpadanga and Tarakeswar, the annual transactions at these markets being about 10,00,000 maunds, 2,00,000

maunds and 10,00,000 maunds respectively. The following table would give an idea of the enormous increase in potato acreage in the district in recent years.[19]

Year	Acres
1950-51	21,400
1960-61	40,700
1961-62	43,000
1962-63	50,100
1963-64	48,100
1964-65	53,900
1965-66	60,800

The higher outturn of potato, which is a perishable commodity, has led to the setting up of a large number of cold storages in the district. According to a report received from the Agriculture Department of the Government of West Bengal, there were, besides the 4 cold storages under construction, as many as 47 of them on 31 December 1965 and all of them handled, mainly, potatoes.*

Sugarcane

Sugarcane is another important cash crop of the district with possibilities of future development. Its acreage in 1960-61 was 4,199 which fell to 2,200 in 1963-64 but rose again to 3,100 in 1964-65.

Sugarcane is grown on *sunā* lands, preferably heavy clayey soils retaining moisture. A brief description of its mode of cultivation, which has not changed much over the years, is given below from O'Malley's Hooghly District Gazetteer of 1912: "The ground is prepared by ploughing and harrowing and also receives irrigation, if the soil is light and porous. It is next manured with oil-refuse, cow-dung and tank mud. In January top cuttings, half a foot long, are placed with oil-refuse in holes arranged in rows a yard apart. In the four months preceding the rains (February to June) the surface is irrigated several times, and after each watering, is hoed. Just before the rains break, the ground round the roots is cleared, old leaves etc. being removed, and manure laid at the roots, after which they are carefully earthed over. During the next five months (from the middle of June to the middle of November) the leaves are usually twisted round the stems to prevent insects or jackals damaging the plants. As soon as the plants are large enough, they are tied together with leaves at the top to prevent the flexible stems falling down. Cutting begins in January and may continue till April."[20]

Sugarcane is a relatively expensive crop as the farmer has to wait for the whole year before he can harvest it. In recent years disease-free seed-cane of improved varieties is being supplied to the growers from State seed multiplication farms. There is also a scheme for payment of a subsidy of 50 paise per maund to the cultivators to meet transport costs of seed-cane. As the crop is rather exhausting to the soil, it is alternated with paddy or jute in the following rains and

* An account of the growth of the cold storage industry in the district has been given in Chapter V on Industries.

potatoes or pulses in the next winter so that the soil has a rest for at least a year and a half. For the paucity of sugarcane crushing factories, cultivators are unable to get a fair price for the crop. The cane-growers are accordingly compelled to produce *gur* by indigenous methods which also does not sell dear. A *khāndsāri* sugar mill has, however, started production at Arambagh since 1968.

Tobacco

Tobacco is grown in small quantities along the river banks, on *chars* and on lands flooded by the spill water of the Damodar. It is sown around October, and reaped about March. In 1836 there was a cigar manufacturing concern at Chinsura run by Messrs Vas Dyk and Company which has long since ceased to exist.

Betel leaf

Pān or betel leaf is largely grown in the district, especially in the Serampore subdivision. The crop requires much care and attention and its cultivation is also expensive. It is raised, more or less exclusively by the Barui caste, in thatched enclosures made of jute stalks. "The cuttings are planted in rows in February and watered daily for the first three months. The leaves begin to shoot in June and July and continue to do so for a year. Old stems are cut down in April when the roots send up fresh stems which begin giving new l aves in June and July. In this way, fresh leaves may be got for several years, otherwise the stem dies in a year." (O'Malley). The betel leaves of Begampur, a village few miles west of Serampore, were once noted for their fine flavour.

Vegetables

Since 1962-63, a good deal of governmental emphasis is being laid on increased vegetable cultivation to relieve pressure on scarce cereals. "On an average, each Stage I, Stage II and post-Stage II block was provided with Rs. 1,000 for setting up of nurseries for distribution of vegetable seedlings and Rs. 500 for distribution of planting materials such as seeds of those vegetables which are directly sown, cuttings, vines etc."[21] The following table provides latest information about vegetable seeds and fruit plants distributed among growers in the district.

Year	Quantity of vegetable seeds distributed	No. of fruit plants distributed
1963-64	150 kg.	78,586
1964-65	143 ,,	43,560
1965-66	135 ,,	41,277

Under the Emergency Vegetable Cultivation Scheme, introduced towards the end of the Third Plan period for producing vegetables in urban areas, a sum of Rs. 5,500 was allotted to 11 municipalities of the district for *rabi* cultivation at the rate of Rs. 500 for each municipality. The Hooghly district is noted for its large vegetable gardens thriving on the remunerative markets of the Greater Calcutta area. The brinjal is a favourite plant but the crop is very exhausting to the soil and cannot be grown on the same field for more than two consecutive years. The brinjal seed is first sown in a nursery in April and

May and the seedlings transplanted after a month in rows, two or three feet distant from each other, in a well-ploughed and manured field. The plants soon grow into shrubs, some two feet in height, and are in bearing from October to March. The variety known as the *muktakesi* is considered the best and grows on banks of the Damodar. *Paṭul* and water melons are extensively grown on the loamy soil of river banks. Cucumbers prosper near homestead lands and pumpkins and gourds are also widely cultivated, the creepers growing on thatched roofs or on the ground. Sweet potatoes are grown on sandy soils and edible tubers called *mān kachu* and *gunri kachu* are cultivated mostly in homestead gardens. The district also excels in avums, locally called *ôl*. Cauliflowers, cabbages, radish, knol-khols, turnips, onions, garlic, chillis, peas, beets, ginger and turmeric are also grown in good quantities. According to some, cauliflowers and cabbages were first introduced in the district by William Carey, the celebrated missionary and educationist.

Fruits

The principal fruits of the district are mango, banana, cocoanut, jack-fruit, papaya, pine-apple and custard apple. Bananas are cultivated on a wide scale and meet the demands of the Calcutta and up-country markets. The chief varieties are *kānṭhāli*, *chānpā*, and the large *martamān*. Litchies, *jām*, *gulāb jām*, *jāmrul* and guava are also grown in orchards. The *sāri* variety of mango is popular in the district.

Cocoanut cultivation

Cocoanut cultivation in the district deserves special mention. In 1965-66 there were three government nurseries in Hooghly located at Chandernagore, Jangipara and Chinsura, of which the first was the oldest having been started in 1951. There are besides two more nurseries at Chinsura and Singur under private management. In the State nurseries, the seed nuts are imported mainly from Kerala, Madras and Andhra and the seedlings are locally raised and distributed among the growers at a reasonable price. In 1965-66 about 1,20,000 seedlings were grown in them (75,000 at Chandernagore, 15,000 at Chinsura and 30,000 at Jangipara) and 96,000 plants were distributed among the cultivators.

The variations in the acreage under principal crops in the district from 1945-46 to 1960-61 are shown in the following table.

(In thousand acres)

	Rice							
Year	Autumn	Winter	Summer	Total	Wheat	Potato	Sugarcane	Jute
1945-46	48.0	346.0	1.6	395.6	0.1	—	2.1	27.3
1946-47	49.0	412.0	1.5	462.5	0.1	—	2.1	19.1
1947-48	39.1	451.6	2.0	492.7	0.6	—	3.1	26.7
1955-56	20.6	369.9	2.5	393.0	3.1	31.3	1.7	82.8
1956-57	21.3	440.5	3.0	464.8	1.4	36.0	1.3	58.7
1957-58	20.4	458.5	2.5	481.4	0.6	37.5	2.0	67.2
1960-61	29.9	448.8	7.9	486.6	0.7	40.7	4.1	58.9

Since the inception of the D.V.C. irrigation system, there has been an appreciable increase in the acreage under various crops in its command areas. Deep tube-wells are functioning in certain localities while others are covered by river lift irrigation. Minor irrigation schemes have also helped in bringing more and more uncultivated or waterlogged areas under the plough. The three following tables furnish the acreage, production and rate of yield of the principal crops of the district from 1961-62 to 1965-66.

(Area in thousand hectares)

Name of crop	1961-62	1962-63	1963-64	1964-65	1965-66
Āman	175.6	178.3	183.3	176.9	183.6
Āus	6.3	6.3	6.5	7.1	8.5
Potato	17.4	20.3	19.5	21.8	24.6
Sugarcane	0.9	0.8	0.9	1.3	1.4
Wheat	0.3	0.3	0.4	0.2	0.3
Jute	43.1	45.2	39.5	40.5	34.4
Pulses	26.6	22.5	18.5	22.5	—
Oilseeds	1.4	1.4	1.1	1.7	—
Mestā	2.8	1.9	1.7	1.2	0.7

(Production in thousand tonnes)

Name of crop	1961-62	1962-63	1963-64	1964-65	1965-66
Āman	203.3	203.9	262.0	236.9	225.6
Āus	5.3	5.7	4.4	7.4	9.3
Potato	324.4	354.4	180.6	293.1	311.6
Sugarcane	87.8	32.5	40.0	55.5	61.3
Wheat	0.3	0.2	0.2	—	0.2
Jute	76.6	78.6	67.6	76.6	42.0
Pulses	10.0	7.1	9.9	10.8	—
Oilseeds	0.4	0.4	0.3	0.5	
Mestā	3.7	2.3	2.1	1 5	1.4

(Rate of yield : quintal per hectare)

Name of crop	1961-62	1962-63	1963-64	1964-65	1965-66
Āman	11.58	11.44	14.30	13.39	12.29
Āus	8.28	8.99	6.72	10.48	10.98
Potato	186.44	174.79	92.74	134.38	126.63
Sugarcane	943.69	422.36	450.11	442.13	432.74
Wheat	9.61	7.78	5.43	2.34	7.39
Jute	17.75	17.39	17.08	18.92	12.19
Pulses	3.74	3.16	5.31	4.80	—
Oilseeds	2.87	2.87	2.69	3.06	—
Mestā	13.45	11.97	13.04	12.55	20.03

PROGRESS OF SCIENTIFIC AGRICULTURE

Traditional implements are still in use in the district though the cultivators are gradually becoming aware of improved agricultural practices. In recent years their interest in improved seeds, pesticides and chemical fertilizers has been more marked than a corresponding concern for using improved agricultural implements.

Agricultural implements

The old agricultural implements, which are locally made include the *lāṅgal* (plough) with its different parts named *murā* (body), *isha* (beam), *phāl* (share) and *bonṭā* (heel). When in use the plough has a *joāl* (yoke) with an *ājkrā* (rope). *Kodāli* or hoe is used for turning up the soil and making field ridges. Another implement is the *moi* or harrow used for breaking up clods, pressing down the soil, levelling the ground and clearing it of weeds. It is drawn by bullocks, the driver standing on it in order to give it weight. Other small implements are the *bidā* or rake which is a wooden bar about four feet long with a few bamboo or iron pins attached to it and the *kāste* (sickle) used for reaping. According to the State Statistical Bureau, there were 8 tractors, 1,27,391 wooden ploughs, 510 sugarcane crushers and 1,763 Persian wheels in the district in 1961. (No later figures are available).

To help the common run of cultivators the State Department of Agriculture has produced several improved implements such as the seed-drill, wheel-hoe, paddy-weeder, mould-board plough and seed-dresser and their large-scale manufacture has since been taken up by private concerns. These appliances are sold to the agriculturists at a 50 per cent subsidy. In 1963-64, 1,286 mould-board ploughs, 87 paddy-weeders and 196 wheel-hoes were distributed. In 1964-65, seed-drills and wheel-hoes sold numbered 550 and 775 respectively In 1965-66, the farmers of the district acquired 85 seed-drills, 149 wheel-hoes, 470 paddy-weeders and 114 seed-dressers.[33] Fitter mechanics, attached to each Block office in the district, now attend to necessary repairs. There is no workshop in the district for manufacturing these improved implements. The fitter mechanics are also not always equipped with the requisite spare parts for undertaking timely repairs. These no doubt discourage farmers from purchasing improved implements. Japanese tractors are being used in the Government agricultural farms, namely the Chinsura Rice Research Institute, the Gram Sevak Training Centre, the Chinsura Agricultural Farm and the Chinsura Banana Research Station. The farmers appreciate the utility of mechanized farming but large-scale use of tractors has not yet been possible owing to the smallness of the agricultural holdings.

Seeds and manures

With a view to achieving the Third Plan target to saturate a large part of the State (45,00,000 acres) with improved paddy seeds, 12 seed stores, each with a capacity of 1,000 maunds of improved seeds, were constructed in Hooghly up to 31 December 1965. There are altogether 17 Blocks in the district and the optimum number of such

stores would be 51, at the rate of 3 stores per Block. In 1965-66 there were 9 Block seed farms in the district located at Balagarh, Adisaptagram, Polba, Dhaniakhali, Singur, Jangipara, Pursura, Arambagh and Khanakul where improved seeds of *āman* and *āus* paddy, potato, wheat, jute, *dhainchā* and pulses were multiplied and distributed to farmers at a concessional price. The response from the cultivators was good.

Manures

The manures in general use are cow-dung, oil cakes, black mud of tanks and hide salt. Dung heaps in which cow-dung waste, straw and household refuse are allowed to accumulate are not uncommon in the villages. Cow-dung is used for all kinds of crops except pulses. Castor oil and mustard oil cakes are applied for potatoes, sugarcane, ginger and cabbages. Tank mud is commonly used in betel plantations and banana orchards. Green manuring is not altogether unknown. In the paddy fields the soil with the tufts of straw of the previous harvest is turned over and leguminous plants, such as *dhainchā*, are grown to enrich it.

During 1964-65, all the Blocks of the district were brought under the local manurial resources scheme, the object of which was to develop manures from locally available resources. The training of farmers at the Block level in the preparation of compost has also been arranged in subsequent years. Subsidies up to 50 per cent of the costs are advanced to cultivators for construction of pucca compost pits and improved cattle sheds. This scheme has found favour with the farmers and the use of cattle-urine, which used to be a total waste, is gaining in popularity. The cultivators are also encouraged to take up green manuring.

During 1964-65, the Uttarpara, Konnagar, Rishra, Baidyabati, Chandernagore and Bhadreswar municipalities came under a scheme for producing town compost. In the following year, the Arambagh and Hooghly-Chinsura municipalities also joined the scheme and during the two years under review, 2,283 and 1,840 tonnes respectively of town compost were produced.[23]

Fertilizers

Following years of propaganda and demonstration, ammonium sulphate and urea have been in great demand in the district followed by some demand of calcium ammonium nitrate as well. The Intensive Rice Cultivation Programme, launched in Hooghly in 1964-65, resulted in a substantial increase in the use of nitrogenous fertilizers used in straight form. The consumption of ammonium sulphate (straight) was only 3,665 tonnes in 1963-64 but it rose to more than 8,000 tonnes in 1964-65. (In the latter year, the actual consumption up to February 5, 1965 was 7,948 tonnes).

Sub-depots of private dealers situated all over the district supply fertilizers to the cultivators. Co-operative societies also help in their distribution. In case of reported malpractice by any sub-depot holder, his licence is cancelled by the Block Development Officer, who is the

licence-issuing authority within the Block, or by the District Agricultural Officer, after proper enquiry. Fertilizer trials are regularly held in the cultivators' plots as also in the Block Demonstration Centres under the supervision of the Block Agricultural Officers. Training camps are also held when the villagers get an opportunity to understand the effect of different kinds of fertilizers on different crops. Fertilizer loans are advanced to the farmers partly in cash and partly in kind.

Soil testing is important to achieve optimum results from the use of chemical fertilizers. Arrangements exist in this behalf in the district but they do not appear to be adequate. Fertilizers may be used either in the straight form or as a mixture containing several plant nutrients. The State Directorate of Agriculture has arrived at certain general fertilizer recommendations for specific crops under both irrigated and rain-fed conditions on the basis of average response obtained from a large number of trials conducted in government farms as also in the cultivators' plots selected at random. They are as below.[84] For short duration paddy, entire P_2O_5 (phosphate) and K_2O (potash) and two-thirds of nitrogen should be applied as a basal dose and the remaining one-third as top dressing three weeks before flowering. For long duration paddy, entire P_2O_5 and K_2O and half of nitrogen should be applied as a basal dose and the remaining half as top dressing three weeks before flowering. For jute, entire P_2O_5 and K_2O and one-third to half nitrogen should be applied as a basal dose and the remaining nitrogen in two equal doses as top dressing at the interval of four weeks after sowing. For wheat, entire P_2O_5 and K_2O and half of nitrogen should be applied as a basal dose and the remaining half of nitrogen as top dressing one month after sowing. For potato, the entire quantity of potato fertilizer mixture should be used as a basal dose. For sugarcane, entire P_2O_5 and K_2O and one-third to half nitrogen should be applied as a basal dose and the remaining nitrogen fertilizer in two equal instalments as side dressing at the interval of six to eight weeks after planting. These recommendations, being general in nature, do not take into account the possible variations in the soil characteristics or the fertility of the individual holdings and as such the results have been found to vary.

Crop rotation

In 1886, A. C. Sen, an agricultural expert who had been deputed to make agricultural enquiries in the Burdwan Division, reported: "Very little can be suggested for the improvement of the cultivation of paddy which has been so long under cultivation in Bengal and grown under such varied conditions that, taking the country as a whole, the ryot's knowledge regarding this important crop has attained a degree of perfection almost unprecedented in the history of agriculture." Writing in 1912, O'Malley also stated: "The ryots of the Hooghly district . . . are industrious and intelligent cultivators; and in the case of the immemorial crops of Bengal, such as rice and

pulses, it is doubtful whether their ordinary methods of cultivation can be improved upon. . . . Rotation of crops is practised and its value understood to a certain extent. The ryots know that certain crops, such as sugarcane and betel-leaf, are exhausting, and that the land must be kept fallow and given rest. Also, on high land they alternate *aus* paddy or jute with pulses, oilseeds or vegetables like potatoes."[25]

The rotation commonly practised in recent times is to have jute followed by potato on high lands. Potato is grown on about 70 per cent of the total jute acreage of the district; the remaining 30 per cent of jute acreage is followed by *āman* paddy. Other types of crop rotation are: *āus* paddy followed by potato and early *āman; āman* paddy followed by *khesāri, masur*, gram and *bôrô* paddy; *āus* and early *āman* paddy followed by wheat, mustard and winter vegetables; potato followed by *til*, which is the latest addition to the crop rotation pattern of the district and onion, maize and cow-peas following *āman* paddy in areas having assured irrigation.

Agricultural diseases and pests

Among animal pests mention may be made of wild pigs, which dig up sugarcane plantations, and jackals and monkeys, which damage water melons, pumpkins and cucumbers. Bird pests include bats, parrots and parakeets which are baneful to guava, litchi and mango groves. Insects, however, cause maximum injury to crops. The pests affecting the various crops are mentioned in the following statement.

Crop		Pests
Paddy	..	Rice hispa, Rice stem-borer, Rice-bug, Swarming caterpillar, Ear-cutting caterpillar, Paddy gallfly, Paddy-leaf roller, Rice-case worms, Paddy grass-hopper, Paddy mealy bug and Termite.
Jute	..	Hairy caterpillar, Jute semilooper, Jute apion, Indigo caterpillar, Jute ring pest, Jute mite, Jute beetle and Termite.
Fruits	..	Mango hopper, Mealy bug and Citrus leaf miner.
Potato	..	Cut worm, Mile cricket, Aphid and Tuber moth
Brinjal	..	Borers, Beetle and Mealy bug.
Cauliflowers	..	Leaf-eating caterpillar.
Mustard	..	Aphid.
Betel-leaf	..	White fly.
Sugarcane	..	White ant, Shoot borer, Top borer, Leaf hopper and Termite.

Besides the pests mentioned above, both *āus* and *āman* plants are sometimes attacked by a mosquito-like insect. An insect called *sānki pokā* occasionally eats away the tender leaves of *āman* paddy

and disappear only after heavy rain. *Āman* plants, at the time of flowering, are also liable to attacks of a kind of black fly which settle on the ears in large numbers. White ants are the sworn enemy of sugarcane and can be combated by the cuttings being dipped in coal tar before they are planted. The attacks of shoot borer, top borer, leaf hopper and termite may be checked by spraying insecticides like B.H.C. 10%, B.H.C. 5%, D.D.T. 10% or Aldrin. The great enemy of bananas is a large black insect, locally known as *ānto-pôkā*, which nestles on the crown of the root stalk and causes the plant to die. In the case of potato, a species of red ant bores through the tuber. The name *dhasā* is locally attributed to a dreaded potato disease which causes the roots to rot after which the plant withers. Thread-like worms often grow inside the roots of sweet potatoes and injure them. Red ants kill young brinjal plants. This crop also suffers from a disease called *tulsimārā* which causes the leaves of the plants to wither to the size of *tulsi* plants. The leaves and buds of young *til* (sesamum) plants are sometimes eaten away by a black insect known as *ṭhikre pôkā*. *Āman* paddy is also subject to a disease called *Kādāmārā* (literally, mud-killing), in the course of which a minute vegetable growth surrounds the lower part of the plant and destroys it in a few days. Fungi also injure the *āman* crop in years of excessive rainfall. Betel-leaf is subject to various diseases of a fungoid nature of which the *āngāre* causes the joints to turn black and rot.

Potato is a very important crop of the district. As such, the method of combating its pests and diseases is dealt with at some length. The grave shortfall in the production of potato in 1963-64, which was disastrous for the economy of the district, was due to the incidence of the late blight disease in an epidemic form. For controlling both pests and diseases the following measures are recommended with modifications to suit local cultivation practices. While preparing the land for sowing it should be treated with 10 kg. of 5% Aldrin or Chlordane per acre if cut worms are a continuing problem in the area. If this operation has not been undertaken already, the field should be dusted, when the crop has come up, with 5% Aldrin or Chlordane at the rate of 10 kg. per acre directing the dusting towards the base of the plants. When the plants are 8 to 10 inches high, the field should be sprayed with a mixture of D.D.T. (50% wettable powder) or Endrin (20% E.C.) and Bordeaux mixture (5 : 5 : 50). The solution containing both the insecticide and the fungicide at the above rates of concentration should be sprayed two to three times at intervals of two or three weeks from the time the crop is two to three weeks old. To spray an acre, 225 to 450 litres of spray will be required.[16]

Activities of the Agriculture Department and other agencies

The Intensive Agricultural Area Programme, launched in 1964-65, was taken up, in the first instance, in nine districts of West Bengal including Hooghly. The modified staffing pattern of agricultural

personnel required in the district to cope with the new responsibilities has been described in Chapter IX on General Administration. The objective of the I.A.A.P. has been officially announced as below: "It has been observed that out of the increased food production in India, two-thirds came from increase in area and one-third came from increase in yield per acre. In contrast, a country like Yugoslavia doubled its crop output in the last 15 years and obtained about 10 per cent increase from an extension of area and 77 per cent of the increase by increasing yield per acre. In the case of Japan which has done very well in agricultural production, less than 3 per cent increase came from the extension of area and the balance from the increase in yield. . . . There is practically no scope for increasing the area under cultivation in West Bengal, and, therefore, the increase in production in West Bengal has to be achieved through increase in per acre yield."[37]

During 1964-65, eleven Blocks of the district were brought under the Intensive Agricultural Area Programme. It was mainly a programme for intensive cultivation of rice in the Dhaniakhali, Polba, Singur, Haripal, Tarakeswar, Pandua, Arambagh, Goghat, Jangipara, Chanditala I and Chanditala II Blocks where irrigation water was available throughout the year. The responsibility to arrange for adequate supply of fertilizers, pesticides, improved seeds and improved implements to the farmers rested with the local officers and Extension staff working in the field.

Within the ambit of the I.A.A.P., a special project known as the High-yielding Varieties Programme was chalked out for the year 1966-67 in 4 Blocks of the district, namely Dhaniakhali, Polba, Pandua and Balagarh. While deep tube-wells and river lift pumps are the sources of irrigation at Pandua, the other Blocks fall within the D.V.C. command area. The cultivated area to be covered in these Blocks is 710 acres of *kharif* and 10,000 acres of summer crop. The staff in these Blocks has also been strengthened for rendering effective technical guidance and assistance to the cultivators and ensuring closer supervision.

These intensive agricultural schemes have necessarily increased the demand for fertilizers in the district. The following table gives fertilizer consumption figures for *kharif* and *rabi* crops in recent years, those for 1965-66 being provisional.

	For *kharif* crops (in tons)	For *rabi* crops (in tons)
1963-64	11,689	19,555
1964-65	15,420	22,630
1965-66	15,239	25,000[38]

Agricultural Research Centres

Agricultural research is being carried on at the Rice Research Institute adjacent to Chinsura. A team of workers under Dr. B. N.

Rice Research Institute, Chinsura

Ghosh has proved by experiments that apart from the regular *āman* crop, which is harvested in November-December, another *āman* crop can be grown on the same land during winter and harvested in early summer provided irrigation water was available. This project is called the Boro Scheme as the time for growing the second *āman* crop corresponds approximately to that devoted for raising *bôrô* paddy. The Chinsura Rice Research Institute took it up in 1961 under a scheme sponsored by the Indian Council of Agricultural Research and financed half and half by it and the West Bengal Government. Starting the experiment on a 12-acre plot, the Institute has succeeded, over the last few years, in raising the State acreage of *bôrô* paddy from 12,000 to 1,00,000 acres. In the Hooghly district, at Naricha in Balagarh P S., 51 maunds of *latāsāl āman* was first grown as *bôrô* and soon after 7,000 acres in the area came under such *āman* (*bôrô*) paddy with seeds from the Chinsura Rice Research Institute. Similar adaptations have also been made in other parts of the district, especially those having assured irrigation. Among the various researches conducted at the Chinsura Rice Research Institute mention may be made of the development of a special strain of paddy termed Chinsura *Bôrô* I which is not only very high-yielding but is least susceptible to attacks from stem-borers.

Vijnān Mandir, Itachuna

The Vijnān Mandir at Itachuna in Pandua police station was established in March 1959 and shifted to its present building in December 1960. The Vijnān Mandir Project was originated by the Council of Scientific and Industrial Research in 1953 in order to stimulate science consciousness among the rural masses. In 1966, there was a chain of 38 Vijnān Mandirs spread over 17 States and Union territories in India. That at Itachuna is equipped with a museum, a laboratory, a library, an audio-visual unit with one 16 mm. sound projector and a slide-cum-35 mm. film strip kerodiascope. The museum contains specimens of local flora and fauna, samples of rocks and minerals, scientific models etc. intended to arouse scientific curiosity about common physical and natural phenomena. The exhibits are explained to the visitors in Bengali by a member of the staff. The Mandir also runs a miniature laboratory for simple analysis of soil, water and food. The small library contains books and periodicals mainly on popular science. There is a farmers' science club with 30 members attached to this institution.

Agricultural farms

The State agricultural farms, from which improved agricultural practices radiate to the countryside, form the foundation of all extension work. Since 1962-63, concerted efforts have been made to improve the working of these farms with the result that in 1965-66 out of the 9 Block seed farms in the district, one each at Singur, Jangipara, Adisaptagram, Pursura and Dhaniakhali were running at a profit. The other four came into existence only in 1965-66 and are still in need of financial assistance.

By multiplication of farm-grown seeds through registered growers, it is possible to maintain a regular flow of improved seeds of high-yielding varieties to cultivators for achieving a higher level of production. High yields obtained as a result of recent improvements in the crop husbandry of departmental farms have made a great impression on the farmers and increased their faith in the efficacy of the seeds and the improved agricultural practices recommended by agricultural experts. In 1965-66, the average yield of paddy in some of these farms was 30 maunds per acre which was much higher than the district average. There is a proposal for establishing a model farm at Dhaniakhali in the near future on the lines of that at Ranaghat.

One mentionable instance of the adoption of improved agricultural practices by common cultivators is reported from the village of Eadpur near Arambagh where two farmers recently produced over 80 maunds (1 maund=37.32 kg.) of *āman* paddy per acre (against the State average varying between 16.04 and 20.25 maunds per acre during the preceding 5 years) by using improved seeds and following the departmental instructions. Similar instances, although not as spectacular, are not rare in other parts of the district.

Gram Sevak Training Centre

The Gram Sevak Training Centre at Chinsura was started in 1962 to impart extension training to village-level workers, who, in their turn, were to guide the farmers in agricultural production. The two years' training course, prescribed by the Government of India, could not be adopted in West Bengal for various reasons and a one-year course was introduced for the first 3 years ending on 31 August 1965 by which time 308 trainees passed out of the Centre. Since October 1965, the two years' course, with corresponding adjustments in the syllabus, has been adopted. In 1966, the roll-strength was 94. The stipend given to each trainee, who should be at least a matriculate, was increased from Rs. 50 to Rs. 60 with effect from 1 June 1966.

The trainees visit the neighbouring villages and take objective lessons in methods and techniques of extension under live conditions. Besides the agricultural plot, there are dairy, poultry and duckery units attached to the training centre. The students learn about common animal diseases and the precautionary and remedial measures to be taken against them. In the poultry and duckery sections, the training includes hatching of eggs, rearing of chicks etc. so that the trainees may help the farmers to multiply their stocks. There is also a workshop wing attached to the training centre.

Co-operative societies

The Co-operative societies help the farmers by way of credit supply, distribution of pesticides, fertilizers and quality seeds, procurement of pumping sets etc. Besides short-term credit for seasonal operations, long-term loans involving large amounts are also advanced by them for making permanent improvement of land, repayment of old dues and consolidation of scattered holdings which may ultimately promote agriculture. The marketing co-operatives, besides helping

in transacting agricultural produce, also provide credit facilities on pledge of goods.

Loans granted to the cultivators are generally called crop loans which are advanced for the production of particular crops and they generally run for a period varying from 6 to 12 months. The distribution of service co-operatives in the district handling farming requisites and agricultural commodities is given in the table below.[29]

Name of Block	No. of service co-operatives	
	Handling farming requisites	Handling agricultural commodities like food grains etc.
Arambagh	20	3
Haripal	18	2
Jangipara	15	5
Dhaniakhali	20	2
Singur	16	12
Tarakeswar	42	18
Pandua	36	4
Goghat	10	Nil
Pursura	14	2
Pulba	9	2
Chanditala I	6	2
Chanditala II	4	2
Khanakul I	5	2
Khanakul II	9	1
Balagarh	3	Nil
Serampore-Uttarpara	1	Nil
Chinsura-Magra	2	Nil

In 1964-65, a sum of Rs. 38 lakhs was advanced by the Central Co-operative Bank to the different working co-operatives in the district while the corresponding amount for 1965-66 was Rs. 395 lakhs which indicates the rapid progress in the matter of extending agricultural credit to deserving farmers. Up to 1965-66, about 16 per cent of the agricultural population of the district was covered by the different co-operative societies in some manner or the other.

State assistance to agriculture

Various kinds of loans, sanctioned by the Collector of the district and disbursed by the B.D.O.'s, are advanced to the agriculturists for increasing agricultural production. The different types of loans

and the amounts distributed from 1962-63 to 1965-66 are given below:

(In thousand Rupees)

Year	Agricultural Loan	Fertilizer Purchase Loan	Cattle Purchase Loan
1962-63	331.1	600.0	238.0
1963-64	310.6	806.2	304.0
1964-65	150.9	1,067.5	310.0
1965-66	130.0	1,045.0	451.1

Besides these, there are other loans provided through the Community Development budget relating to schemes for distribution of improved poultry, irrigation, reclamation of waste land etc.

ANIMAL HUSBANDRY AND FISHERIES

Area under fodder crops

There is very little pasturage in the district and cattle usually graze in the fields after the crops have been reaped, picking up what little they can. The local cattle are, therefore, of the nondescript type, ill-fed in most cases. There is hardly any separate land either to raise fodder crops, all available cultivable area being utilized for growing important crops. The area exclusively under fodder crops was estimated to be only 896 acres in the whole of the district in 1966. But the villagers are nevertheless interested in the cultivation of seasonal fodder crops like jowar, maize, *khesāri* and *beerseem* on the same land where paddy or jute has been grown. There is one model fodder farm at Tarakeswar-Baliguri where various fodder crops are raised all through the year. Fodder seeds and cuttings are also supplied to the farmers from the office of the District Live-stock Officer. During the Second Plan period about 766 maunds of seeds and cuttings were distributed at subsidized prices among the villagers of the district and 138 silage pits were constructed for development of green fodder. In the Third Plan period about 312 quintals of fodder seeds were distributed and 125 silage pits constructed. Demonstration of fodder crops was also arranged on farmers' lands and this was done on 42 selected plots. Subsidy was also given for 63 chaff-cutters purchased during the period.[20]

Dairy farming

Formerly there was no arrangement for collection of milk from the district under Government supervision. The milkmen, particularly of the Singur, Haripal, Dhaniakhali and Tarakeswar police stations, used to bring their milk and casein to the Calcutta market themselves. By 1966, 5 chilling plants, located at Dhaniakhali, Magra, Kamarkundu, Haripal and Chanpadanga, were in operation under the control of the dairy development wing of the Animal Husbandry Department for collection and supply of milk to Calcutta.

Poultry farming

There is one Poultry Extension Officer at Tarakeswar-Baliguri under the direct control of the Animal Husbandry Department. Besides the units supervised by him, there are about 50 other poultry units under the Applied Nutrition Poultry Scheme. These establishments are looked after by the poultry growers themselves, financial assistance and technical advice being available from the Animal Husbandry Department. In each Block area, a sum of Rs. 400 is annually distributed to deserving poultry growers and technical advice is given to them by the Block Veterinary Assistant Surgeon. Poultry farming in Hooghly district is fairly extensive inasmuch as there are about 150 poultry units in the Chinsura-Magra and Singur Blocks alone.

Pig farming

Towards the end of the Second Plan period, steps were taken at Balagarh and Magra-Polba Blocks for improving the local stock of pigs through breeding with large Yorkshire boars. During 1965-66 about 100 such boars were distributed in the said Blocks at concessional prices with the added facility that the caretaker will get Rs. 15 per month for a specified period as maintenance allowance.

Measures to improve quality of breeds

For improving bovine stocks, breeding is mainly done by artificial insemination in all the Blocks of the district except in Chanditala and Balagarh where servicing is done by Tharparker, Haryana and Sahiwal bulls. Under the 7 artificial insemination centres located at Chinsura, Pandua, Belmuri, Singur, Tarakeswar, Polba and Jangipara, there are 69 sub-centres for meeting the needs of villagers all over the district. The number of cows artificially inseminated during 1963-64, 1964-65 and 1965-66 was 84, 1,278 and 1,456 respectively.

Cattle and poultry diseases

Rinderpest, black-quarter, foot and mouth disease and anthrax are the principal cattle diseases while poultry suffer from Ranikhet disease, fowl pox and fowl cholera.

In the pre-Plan days, the procedure for confirming contagious cattle or poultry disease was to send blood smears and other laboratory materials to the West Bengal Veterinary College at Calcutta This dilatory procedure was discontinued during the First Plan when diagnosis was arranged with the State Veterinary Hospitals in the districts employing veterinary pathologists. As mortality from rinderpest and Ranikhet diseases among cattle and birds was the highest, mass vaccinations have been undertaken as a preventive measure. The number of vaccinations against rinderpest was 56,725 in 1963-64 which increased to 57,848 in 1964-65 and 65,432 in 1965-66. 61 cases of cattle epidemics were attended to by the district veterinary staff in 1963-64 while the number of such cases in 1964-65 and 1965-66 was 20 and 36 respectively. The corresponding number of poultry epidemics attended to in 1963-64, 1964-65 and 1965-66 was 106, 103 and 118 respectively. The number of mass vaccination against Ranikhet disease in poultry was 1,21,746 in 1963-64, 1,36,195 in 1964-65 and 1,81,718 in 1965-66. Cattle and birds treated during

1963-64, 1964-65 and 1965-66 numbered 42,763, 43,201 and 30,142 respectively.[31]

During the First Plan period, there were 2 veterinary hospitals in the district at Chinsura and Serampore besides 7 veterinary dispensary-cum-peripatetic service centres at Arambagh, Pursura, Khanakul, Singur, Balagarh, Dhaniakhali and Polba. Four veterinary aid centres functioned at Arambagh, Khanakul, Pursura and Polba. During the Second Plan, the number of veterinary dispensaries increased to 12, the new ones being located at the Block headquarters of Jangipara, Goghat, Chanditala I, Chanditala II and Khanakul II. Veterinary aid centres also increased from 4 to 12, those newly opened being at Singur, Balagarh, Dhaniakhali, Jangipara, Goghat, Chanditala I, Chanditala II and Khanakul II. During the Third Plan period, 2 more veterinary hospitals were established at Haripal and Arambagh and 2 more Block veterinary dispensaries and 2 aid centres at Haripal and Tarakeswar.

The Veterinary Assistant Surgeon attached to each Development Block is in charge of the Block veterinary dispensary. He is assisted by 2 Veterinary Field Assistants. Each veterinary aid centre, usually lying in the interior, has one Veterinary Field Assistant. The Veterinary Assistant Surgeon and his Field Assistants treat cases both at Block headquarters as also in the outlying villages and undertake preventive mass-vaccination of animals and birds and advise the villagers on specific subjects like improvement of cattle and poultry stocks. The District Veterinary Officer inspects all veterinary hospitals, dispensaries, aid centres and peripatetic service centres and advise on technical matters.

Towards the end of the Third Plan arrangements were made for intensifying veterinary treatment and controlling cattle and poultry diseases in the interior of the district by bringing into operation an ambulatory clinic-van well-equipped with medicines and up-to-date apparatuses like microscopes and refrigerators.

Livestock statistics

The table below gives statistics of livestock and poultry in the district for the three selected years 1951, 1956[32] and 1961[33]. (More recent official figures are not available.)

STATISTICS OF LIVESTOCK AND POULTRY IN THE HOOGHLY DISTRICT FOR THE YEARS 1951, 1956 AND 1961

	1951	1956	1961
Cattle			
Cows	2,13,410	1,84,056	2,09,372
Bulls & Bullocks	2,39,095	2,03,920	2,14,371
Young stock	1,95,685	1,49,013	1,46,775
Total	6,48,190	5,36,989	5,70,518

STATISTICS OF LIVESTOCK AND POULTRY IN THE HOOGHLY DISTRICT FOR THE YEARS 1951, 1956 AND 1961 (*contd.*)

	1951	1956	1961
Buffaloes			
Cows	2,455	3,615	7,605
Bulls & Bullocks	8,145	6,663	4,419
Young stock	1,405	1,941	6,309
Total	12,005	12,219	18,333
Sheep	2,855	3,526	4,041
Goats	2,75,882	2,06,767	2,41,655
Horses & Ponies	109	98	539
Pigs	8,532	5,209	1,879
Others	52	33	33
Poultry			
Fowls	3,10,045	3,01,837	3,67,239
Ducks	2,50,258	4,95,029	2,97,396

Fisheries

Writing in 1876, Hunter stated: "There are no regular fishing towns or villages in Hugli, although fishing forms a part of the occupation of both men and women over a great portion of the District. The Collector of Hugli roughly estimates the proportion of the inhabitants that live by fishing at about two per cent of the total population of the District. According to the Census of 1872, this would give a total fishing population of 29,770 souls. In the detailed statements of the Census Report, however, the number of Hindu fishing and boating castes is returned at 57,887 or 3.88 per cent. of the population, exclusive of the Muhammadans, who form 20 per cent. of the inhabitants of the District. . . . Fish forms a very important article of diet of the people, and is largely consumed by both Hindus and Muhammadans. No limit is placed upon the destruction of the finny tribes—breeding fish and young fry are indiscriminately captured by means of traps, weirs, and nets with infinitesimally small meshes. Fry, besides being used as food, are also sold at the beginning of the rains to re-stock tanks etc., where fish are privately bred. With regard to the question as to whether any measures are necessary for the conservation of the fish, the Collector of the district reports that fish are still very plentiful, that the supply does not seem to be falling off, and that there appears to be no necessity for any special measures for their preservation."[34]

It would appear that in spite of wholesale slaughter fish were plentiful in the district a hundred years ago. Even in 1912, when O'Malley wrote the old Hooghly Gazetteer, the position of fish supply

was quite satisfactory. "Fishing is an occupation followed by a considerable number of members of the lower castes, especially Bagdis, Kaibarttas (Jaliya) and Tiyars, for fish is always in demand. . . . Fish are plentiful in the winter months, when the local supply is supplemented by imports from the Hooghly estuary and the Padma, from Bihar and Bhagalpur. Hence, except on marriage days, (called *laganshā*), the price remains fairly uniform at this season of the year. The price is higher during the rains, when *hilsā* are abundant, but most other fish are scarce on account of floods."[38] Many kinds of fish were then caught in the rivers, marshes, and tanks. Estuarine fish such as *bheṭki, hilsā, pārsey, khayrā, topsey* and *phasā*, coming up the Bhagirathi to breed, were trapped in large numbers. Of fresh water fish, found in rivers and tanks, the most valued were of the Indian carp family, namely *rui, kātlā, mirgel, kālbāus,* and *bāṭā, chital, saralpunṭi, khalsey, pābdā* and *ṭangrā*. In the rice fields, *jhils* and roadside drains smaller fry like *chāndā, mauralā, punṭi* etc. were found. They used to form valuable ingredients of the scanty diet of the poorer classes. Several fresh water fish thriving in muddy, stagnant water, e.g. *koi, māgur, siṅgi, sôl* and *laṭā* were prescribed for invalids and convalescents. Shrimps, prawns and crabs found in quantities were largely consumed. Oysters were not available but *gugli*, found in ponds and shallows, were used for food by the indigent.

Fish constitutes, even today, a major item of the staple food of the people of the district but supplies are severely lacking. There are no arrangements for the preservation of fish and they are mostly consumed fresh. No dependable statistics are available regarding the volume of consumption of fish in the district. In 1966, the prices ranged from Rs. 4.50 to Rs. 6.50 per kg. for carps weighing more than 2 kg. and from Rs. 3 to Rs. 4 for carps weighing less than 1 kg. The price of *hilsā* was from Rs 5.50 to Rs. 9.00, *jeol* (live) fish from Rs. 5 to Rs. 7, prawn (*bāgdā*) from Rs. 3.50 to Rs. 4.50, lobster from Rs. 5.50 to Rs. 6.50, *topsey* from Rs. 6.50 to Rs. 8.50 and other miscellaneous fish from Rs. 2.50 to Rs. 4.50 per kg.

Water resources available for pisciculture in the district are the tanks, *jhils* and *bils* while fish grow naturally in the rivers and canals. To step up fish production, arrangements have been made in recent years for supply of seedlings, and fish fry to villagers at subsidized rates. During the First Plan period, three schemes known as the Unionwise Tank Fishery Development Scheme, the Thanawise Demonstration Fish Farm Scheme and the Scheme for Improvement of Tank Fisheries in the Dry Districts of West Bengal were in operation in Hooghly. During the Second Plan, several schemes for augmenting fish production in culturable and semi-derelict tanks and also for assisting fishermen and their co-operatives by granting loans were implemented in the district. The following table will give

an idea of the progress of work connected with the development of fisheries in the district during the First and Second Plan periods:

FIRST FIVE YEAR PLAN

Name of Scheme	Financial outlay (in Rupees)	Physical achievements		Remarks
		No. of tanks developed	Water areas involved (in bighas)	
Unionwari Tank Fishery Development Scheme	1,96,300 as loan	1,246	3,457	
Improvement of Tank Fisheries in the Dry Districts of West Bengal	86,675 as loan	371	660	
Thanawari Demonstration Fish Farm Scheme	4,217 as subsidy			Distribution of 16 boats & 137 nets to fishermen

SECOND FIVE YEAR PLAN

Name of Scheme	Financial outlay (in Rupees)	No. of tanks developed	Water areas involved (in bighas)	Remarks
Short-term Loan Scheme for augmenting fish production in culturable tanks	15,210 as loan	109	317	
Medium-term Loan Scheme for augmenting fish production in semi-derelict tanks of West Bengal	37,280 as loan	189	293	
Thanawari Demonstration Fish Farm Scheme	7,200 (as subsidy)	7	52½	
Scheme for assisting needy fishermen and their co-operatives by granting loans	27,995	—	—	174 fishermen benefited
Scheme for intensifying the production of carp fry by granting bonus to fishermen	8,280 (as bonus)	—	—	No. of fry raised—40,41,000
Scheme for popularizing the use of fish pond manure by granting subsidy	6,050 (as subsidy)	—	—	Quantity of manure produced—3,025 mds.

THIRD FIVE YEAR PLAN

Name of Scheme	Financial outlay (in Rupees)	Physical achievements: No. of tanks developed	Water areas involved (in bighas)	Remarks
Short-term Loan Scheme	5,070 (as loan)	43	152	—
Medium-term Loan Scheme	59,090 (as loan)	194	978	—
Scheme for assisting fishermen	17,894 (as loan)	—	—	174 families benefited
Demonstration Fish Farm Scheme	7,055 (as subsidy)	—	—	—
"	6,300 (as bonus)	—	—	For production of carp fry
Scheme for popularizing fish pond manure	4,749 (as subsidy)	—	—	—
Scheme for utilizing Government-owned tanks	2,191 (as grant)	16	21	—

Towards the end of the Third Plan period, two new schemes known as the Scheme for Intensification of Fisheries Programme in C. D. Blocks and the Fisheries Scheme under Applied Nutrition Programme were taken up. The former envisages supplying of fish seedlings and fish pond manure at a 50% subsidy to private tank owners in Haripal, Tarakeswar, Khanakul I and II, Pursura, Arambagh and Goghat Blocks with a proposal to extend it to Chanditala I and II Blocks at a later stage while the latter seeks to establish one Block Seed Farm each at Chinsura-Magra and Singur Blocks.

Fishing equipments

The fishermen of the district use a variety of fishing nets locally known as *Bin-jāl*, *Behundi-jāl*, *Berā-jāl*, *Ṭānā-jāl*, *Khyaplā-jāl*, *Jujri-jāl*, *Chāl-jāl* and *Masāri-jāl*. Various other contrivances like *Ghuni*, *Pōlō*, *Bārh* etc., made of split bamboos, are also in extensive use.

Fishing seasons

Carps and several other local varieties of fish are available throughout the year. The *hilsā* fishing season commences with the onset of the monsoons in June and lasts till October-November. It may, however, be added that the *hilsā* is becoming rarer day by day partly due to the rapid silting up of the Bhagirathi and the Damodar and partly due to the indiscriminate destruction of the species. (A more detailed account of the decline of this popular variety of fish has

been given under the section 'Fauna' in Chapter I.) *Tilapia mossambica (Tilāpiā)* and *Cyprinus carpio* (common carp) are the two exotic varieties recently introduced in the district which are available all round the year and are noted for their rapid multiplication and quick growth.

There are several fishermen's co-operatives in the district which, because of their moribund condition, did not receive any financial assistance from the Government in recent years, according to a report sent by the District Fisheries Officer, Hooghly.

An account of the administrative set-up responsible for implementation and supervision of fisheries schemes in the district has been given in Chapter IX on General Administration. There is no fisheries research centre in the district. Multi-ownership of tanks and the general dereliction of local rivers are among the impediments that stand in the way of development of fisheries in the district.

FORESTRY

Importance of forests

"Forests perform three types of functions. They provide a protective cover which helps to arrest soil erosion, preserve water resources and stabilize climatic conditions; they render productive services by supplying timber and other subsidiary products; finally, they confer some recreational, aesthetic and scientific benefits."[36]

Forest produce

Hooghly is not rich in forests; only patches of scrub jungle can be seen in the Goghat police station. The total forest area of the district was 730.56 acres in 1965-66 which was entirely planted with timber and fuel species, namely *Tectona grandis*, *Dalbergia sissoo*, *Cassia siamea*, *Terminalia arjuna*, *Salmalia malabarica*, *Ailanthus excelsa*, and bamboo.[37] The annual value of each type of forest produce is not ascertainable but about Rs. 2,700 is earned annually from casual sale of thatch grass and fuel.

Afforestation

The area covered by afforestation was 52.50 acres during the Second and 46.62 acres during the Third Plan periods. The digging of contour trenches, 15 feet apart, with heaped-earth ridges running alongside them is now engaging the staff of the Arambagh Range for combating soil erosion. The planting of trees on waste lands is also in progress there. As has already been stated in Chapter I, several valuable species, of which the *sāl* is the most important, have been introduced in the district since 1954. There is no research centre or school in forestry in the district.

FLOODS, FAMINES AND DROUGHTS

Floods

The district is a low-lying tract with a good rainfall and the land has a gradual slope from north-west to south and south-east. It is intersected by three large rivers and numerous small streams. Between the Dwarakeswar and the Bhagirathi, there are raised river banks, embankments and depressions. These depressions are very low and, at places, as low as to be only eight feet above sea-level. Between

the Damodar and the Dwarakeswar the land has more or less the same features and is also liable to floods.

Floods of 1660 and 1684

Formerly, floods were not only a frequent occurrence but were attended by great loss to life and property, "especially during freshets, when the water in the rivers was banked up by strong southerly gales or high spring tides."[36] The earliest recorded flood in the district took place some time in 1660 when a strong freshet in the Bhagirathi swept away the old Dutch factory in Hooghly town. It is also on record that on 3 September 1684 the Bhagirathi rose to a height of two to four feet above the level of the Hooghly Bazar and swept away more than a thousand huts in the Dutch quarters at Chinsura. Stavorinus, writing in 1769, spoke of a tidal bore which came up the Bhagirathi and was six to eight feet in height or even higher at places.

Damodar flood of 1787

The record of the ravages of the Damodar dates back to October 1787 when this "river of sorrow", bursting its banks, swept away "*hats*, temples, *ganjes* and *golahs*."[39] The causes of the floods in the Damodar (as also in other rivers of the district) have already been fully discussed in Chapter I. Our present account of the floods may, therefore, be kept confined to their effects in the field of agriculture.

Damodar flood of 1885-86

In 1885-86 there was another severe flood in the Damodar inundating 233 square miles of territory and inflicting heavy loss to crops in the low lands of the Sadar and Serampore subdivisions. No loss of human life was reported and few cattle were drowned but there was mortality among the latter on account of acute shortage of fodder. Rs. 15,000 was disbursed as charitable relief and Rs. 2,000 as agricultural loan during the period.

Flood of 1901-02

During 1901-02, parts of the Arambagh and Khanakul police stations were flooded by the Damodar but no serious damage was done to life and property. A sum of Rs. 2,000 was spent from Babu Ramlal Mukherjee's Fund for the relief of the homeless people and a further sum of Rs. 14,000 was made available from provincial revenues for granting *ṭākkāvi* loans.

Flood of 1934-35

Following a period of drought, there was heavy rain in the catchment area of the Damodar in August 1903 inundating about 350 square miles of riparian tracts in the Burdwan, Bankura, Hooghly and Midnapur districts. The flood waters reached the well-known Tarakeswar temple in this district and for a time fears were entertained about its safety. The damage in the affected areas was confined mainly to mud huts of which approximately 25,000 were destroyed in the Hooghly district. The flood level however fell rapidly and energetic action by local officers and charitable organizations prevented any serious catastrophe in the form of either starvation or epidemics. The Government and the District Board jointly distributed Rs. 7,000 as gratuitous relief, mainly for rebuilding houses.

Recent floods

Floods also occurred in the Damodar in 1939, 1941, 1949, 1956

and 1958, the last being the most severe in recent years. On all these occasions house-building loans were advanced to deserving persons. Dry doles were also issued to rescued people kept in tents.

Famines

Little is known of famines which visited the district prior to the period of British rule. O'Malley in his Hooghly District Gazetteer of 1912 mentioned that the terrible famine of 1671, which practically devastated Bihar where more than 1,00,000 people perished, found no echo in the district. The scarcity conditions of 1710 culminated in a famine in the following year when several thousand persons died of starvation. In Calcutta, the East India Company distributed about 500 maunds of rice to the distressed and made special arrangements for importing rice from cheaper markets.

Early famines

The earliest famine recorded during the British rule was that of 1769-70 about which Stavorinus, who visited Chinsura in 1769, wrote: "The banks of the rivers were covered with dying people." A starving man waiting for death in the streets of Chinsura was reportedly devoured by jackals. S. C. Dey, author of 'Hugli, Past and Present', also states that the famine of 1770 swept away one-third of the inhabitants of Bengal.

Famine of 1769-70

In the following decade, while the famine of 1783 affected Hooghly only indirectly, the district, along with other parts of the Province, suffered a great deal during the famine of 1788. *The Calcutta Gazette*, in several of its issues of 1788, reported that 4,000 persons were in receipt of daily succour in Calcutta; that Rs. 15,000 had been collected for relief purposes and that 70,000 persons were supposed to have perished in East Bengal. In July of that year, the Raja of Burdwan filed a petition pleading his inability to pay his arrears of revenue in view of the calamitous condition in his estates

Famines of the 19th century

Since then, according to O'Malley, the district did not suffer from any widespread famine, though there have been periods of distress, as in 1834, 1837 and 1845, when local scarcities ensued from droughts succeeding floods. The district also does not appear to have greatly suffered from the drought of 1865, "but so much of the soil is devoted to fruits and valuable products, such as jute, sugarcane, plantains, potatoes, etc., that a considerable portion of coarse rice, required to feed the population, is always imported from other districts, and these supplies having been curtailed by the failure in the adjoining country, the price of rice was greatly enhanced. Scarcity and distress were severest in the west of the district, where the failure of crops was most general, and where there was a large non-agricultural population of the weaver class, who underwent great suffering."[40] The distress was intensified by a flood in the rainy season of 1866. At Chinsura a committee formed by local gentlemen raised a fund of Rs. 6,000 for relief work and fed paupers daily from 14 July to 16 October of the same year. The aggregate number of such destitutes ultimately exceeded 1,00,000. Two relief

centres were established, one at Hooghly and the other at Chinsura. A relief hospital was opened in July at Jiban Pal's Garden near the Hooghly railway station which was later moved to the premises of the Imambara Hospital. By the middle of October, the fund of the committee was entirely exhausted and was supplemented by a grant of Rs. 1,000 from the Board of Revenue. Local committees were also formed at Uttarpara and Serampore for distribution of food, clothing and medicines to the distressed people of those areas. O'Malley reported in his Hooghly District Gazetteer of 1912 that a relief hospital at Hooghly and a temporary pauper hospital at Uttarpara were functioning at that time. "Including Chandrakona and Ghatal, which were then part of the district, the average daily number of persons in receipt of relief in the district was reported to be 645 in July, 3,242 in August, 6,741 in September, 7,041 in October, 5,041 in November and 1,041 in December."

The famine of 1874

The famine of 1874 did not affect Hooghly severely but distress was witnessed pretty near the district in parts of Birbhum, Burdwan and Bankura. Relief work was started to employ the afflicted but the maximum daily average attendance recorded was only 1,911 in April 1874. A sum of Rs. 2,20,000 was spent in all in relief work, the highest daily average of persons receiving relief or employed in light work being 50,234 in September. In 1883 and 1897 there were local scarcities owing to partial failure of crops in the Arambagh subdivision. The Sanitary Commissioner's report for 1883 notes that the high price of foodgrains in the subdivision told upon the poorer classes.

The famine of 1943

According to the Woodhead Inquiry Commission's report of 1945, a grave shortage of food began to be felt in Bengal by the end of December 1942. The crisis developed rapidly in the Greater Calcutta area and became acute in March 1943. The measures taken by the Central and Provincial Governments prevented a catastrophe in Greater Calcutta, which was then the main war base of the Allies in East Asia, but the disaster broke out in all its fury in the interior of the State. The failure of the winter crop (*āman*) of 1942 combined with meagre stocks of rice carried forward from 1942 to 1943 led to a serious shortage in the total supply of rice available for consumption in Bengal. The stoppage, due to war, of imports from Burma and lack of planned movement of supplies available from sources outside the province added to the difficulties. Among other reasons was the 'denial policy' adopted by the military authorities which hindered distribution and "led to fortuitous accumulation of large stocks on private account, both physically and proprietorily, and gave rise to the great anti-social phenomenon of hoarding and profiteering."[41]

While the Woodhead Commission did not accept the popular estimates of mortality, it nevertheless held that official figures underestimated the total number of deaths. Deaths occurred as a direct result of the famine as also of the epidemics following in its train.

The Commission was of the view that as a whole famine mortality was greater among men than among women. A considerable fall in birth-rates occurred in most of the districts of Bengal except in Hooghly and West Dinajpur where, paradoxically, a small excess of births over deaths in 1943 was recorded. "During 1941-51 the district (Hooghly) was not in the direct famine zone but suffered from epidemics in 1944."[43] No dependable information is available about actual mortality in the district due to causes arising directly or indirectly from the 1943 famine. Computation of such data was also a difficult proposition because of the migration of famine victims, who generally tended to wander from the worst affected areas to places, within or without the district, where chances of survival were better. Concrete figures regarding deaths from epidemics are also not available. A general assessment is, however, permissible that the large number of factory workers in the district, who were mostly engaged in war production which safeguarded their food supplies, escaped the ravages of the calamity. In the interior the situation was more or less the same as in other districts of Bengal.

The 1943 famine was sufficiently arrested during the following year. Since then there has been no major food shortage in the district except sporadic instances of local scarcities calling for occasional test relief operations or other forms of governmental assistance.

NOTES

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CHAPTER V

INDUSTRIES

In no other district in West Bengal, except Howrah, is the proportion of persons engaged in industrial occupations so large as in Hooghly. Some places of the district were important centres of commerce and industry even in the distant past. Saptagram, for instance, rose to become a principal inland port with the decline of Tamralipta (modern Tamluk) and it was to this great mart of Bengal that a very large volume of the sea-borne trade of the times was brought. In the 17th and 18th centuries, subsequent to Shahjehan's destruction of the Portuguese settlements at Hooghly, Saptagram declined as its trade was taken over by the various European settlements along the Bhagirathi, namely Chinsura, Chandernagore, Serampore and Calcutta. The importance of the town of Hooghly was also considerable at that time as it served as the leading centre for overseas trade.

OLD-TIME INDUSTRIES

The old-time industries of the district are silk and cotton handloom weaving, *chikan* embroidery, brass and bell-metal manufacture, bricks and tiles, rural oil pressing, hand-pounding of rice and village tanning. While many cottage industries were in existence before the British came to India, there were others which developed with the arrival of the European settlers in Bengal. During the early years of British rule (1760-1840), the principal industries of the district were carried on either under direct European supervision or with advances made by European capitalists. During the latter part of the 19th century, the two most noticeable features in the industrial history of the district were the gradual decline of many of the industries run by private individuals or companies, except the manufacture of bricks, tiles and *soorki*, and the development of large industrial concerns financed and managed by Europeans.

The silk industry of the district prospered when the East India Company took interest in it and exported silk fabrics to different European countries regularly. But this village-based industry received a set back when indigenous silk mills came into existence. The stiff competition of mill-made textile goods from Manchester was another factor indirectly contributing to the decline. Cotton handloom weaving, which has been discussed below in details under the category of cottage industries, has also a long history and the places where it thrived were Serampore, Chandernagore, Atpur, Jaynagar, Kaikala, Dhaniakhali, Khanyan, Rajbalhat and Chanditala. Initially, it flourished

under the active patronage of the East India Company, but the entry of Manchester into the Indian market crippled it severely. The *chikan* embroidery industry was also well-known and the Muslim artisans of Babnan (Dadpur P.S.) and neighbouring places who had mastered the skill since the Muslim period made it their traditional vocation. Brick and tile making has also been practised for long in the areas flanking the Bhagirathi and the Saraswati. Brass and bell-metal manufacture was mostly located at Nabagram, Bansberia, Arambagh, Bali-Diwanganj etc. Oil pressing, hand-pounding of rice and the village tanning industries were scattered throughout the district. The descriptions of some of the more important old-time industries are given below.

Silk and tusser weaving

Towards the latter part of the 18th century silk was a monopoly in the hands of the East India Company and their *aurangs* or factories in the district were managed by the Commercial Residents of Haripal, Khirpai and Radhanagar. The factory at Khirpai was reportedly running well in 1795 and most probably it existed prior to 1765. Before the advent of the British merchants, Bali-Diwanganj, on the west bank of the Dwarakeswar in Goghat thana, was an important centre of silk trade financed from Upper India, to which the silk manufactured was transported on camels. The centre declined with the establishment of the factories of the E. I. Company which exported their silk goods by water from Ghatal to Calcutta and thence to Europe. A brief account of the silk and tusser industries as they existed in the district towards the close of the last and the beginning of the present century may be had from O'Malley's Hooghly District Gazetteer of 1912 which is reproduced below: "On their (E. I. Company's) withdrawing from commercial operations, it (the silk trade) passed into the hands of private European firms, and in particular of Messrs. Robert Watson & Co. It gradually declined owing to the fluctuating nature of the demand, the restriction in the mulberry-growing area caused by the Damodar floods, the degeneracy of the silk-worms and their dying off from disease. By the end of the century silk-weaving was confined to Serampore and to a few places around Bali-Diwanganj in the Arambagh subdivision; while, even in the latter subdivision, a good many took up tusser reeling and weaving instead of working in pure silk. . . .

"The weaving of tusser silk fabrics is an industry of some importance in the Arambagh subdivision. The tusser cocoons are brought from Chota Nagpur to Badanganj and sold, according to size, in three classes. . . . The traders sell them retail to the weavers and others, whose women spin the threads. Thread is also brought from Sultanpur in Ghatal, and from several villages in Arambagh, e.g., Manikhat, Raipur and Salehpur. The weaving of the thread into cloth is carried on in the Goghat thana and especially in the villages included in the Badanganj outpost, which adjoins the Bishnupur

subdivision of the Bankura district and the Ghatal subdivision of Midnapore, two important centres of the tusser silk industry. The chief places at which it is carried on are Bali-Diwanganj, Syambazar, Badanganj, Kayapat, Kalagachia and Radhaballavpur. The fabrics produced are *sāris, dhotis, jors* (suits consisting of a *dhoti* and a *chaddar*), and dress-pieces made to order. They are sold either to local traders, who make advances to the weavers, or in the local markets, or are sent to the large *hāts* held at Ramjibanpur in the Ghatal subdivision and Ramkrishnapur in Howrah town. . . .

"Fabrics of mixed silk, tusser and cotton, known as *ranginā*, are made at Bali-Diwanganj, Udayrajpur and other villages in the Arambagh subdivision from which they are exported to the Punjab and United Provinces. This industry dates back to the days of the Mughal rule. . . . The trade is in the hands of up-country merchants, who have local agents for the purchase of the cloth."[1]

Silk and tusser dhotis, saris and chaddars continued to be woven in the villages of Kayapat, Badanganj, Fului, Kristoganj etc. in the Arambagh subdivision even in the thirties of the present century. There were about 3,000 weavers in these villages in 1929 and they could weave both silk and cotton. Their products mostly passed through the Howrah *hāṭ* to North Bengal districts. The artisans worked on the *bāni* system, the per capita income being Rs. 40 to 50 a month. In the Report on the Survey of Cottage Industries in Bengal (1929) it was estimated that the total annual output of the weavers of these villages was valued at three to four lakhs of rupees.[2]

During the years preceding the Second World War, mixed fabrics using silk and cotton yarns produced at Dhaniakhali and Horal in Sadar subdivision and Badanganj in Arambagh subdivision used to be exported in some quantities to foreign countries through such European firms as Messrs. Walker Gouard, Shaw Wallace etc. Abinash Chandra Dutta of Dhaniakhali and Dharmadas Dalal of Arambagh were prominent middlemen working between the local artisans and the Calcutta firms. The weavers worked on the *bāni* system, the average earnings being Rs. 30 per head per month. The total annual output of these centres at that time was estimated at two lakhs of rupees.

Cotton handloom weaving

Cotton handloom weaving is an old-time industry which still maintains its vigour exporting huge quantities of its products outside the district. This has become possible more on account of a thorough reorganization of the industry in recent times than because of any inherent vitality of the craft. Accordingly, it has been dealt with, more appropriately, under the section 'Cottage Industries' later in this chapter.

Indigo and tobacco industries

Indigo appears to have been introduced into the district as early as in 1780 by one Mr. Princep and the industry was well established by 1793. During 1822-42, indigo factories existed at Chanditala,

Bansberia, Hosnabad, Talda, Durgapur, Kalkapur, Melia, Paigachhi and Khanyan, the last being owned, in 1830, by a Bengali named Darpa Narayan Mukherjee. The industry has since completely died out from the district. There was also a tobacco factory at Chinsura in 1836 started by a Dutch firm.

Bricks and tiles

By the end of the last and the beginning of the present century, the brick and tile-making and *soorki*-pounding industries were firmly established along the west bank of the Bhagirathi from Bansberia on the north to Uttarpara in the south as also along the Bally Khal wherever suitable soil could be found. Tile-making was specially concentrated in and around Kotrung. Quoting figures for 1907, O'Malley stated that there were 11 brick-fields and 31 *soorki* mills in the district each employing 50 or more workers. In later times, the Calcutta Corporation had its own brick-fields at Kotrung for several years but the site was subsequently leased to private parties. The recent phenomenal expansion of the Greater Calcutta area accompanied by large-scale building activities has given a great fillip to this industry.

Manufacture of rum and ice

The manufacture of rum was another old-time industry of some importance and the earliest distillery was set up at Bandel in 1810. "The business prospered for some years, the rum being not only supplied to the troops in India but also exported to Europe and Australia; and the sales in 1829 amounted to 61,028 gallons. Other distilleries sprung up at Ballabhpur, Paddamdanga, Dhanguri, Rishra, Konnagar, Bankipur and Chandernagore, but owing to the fall in the price of rum exported to Europe the industry became extinct about 1840."[3] That ice was once manufactured at Hooghly deserves mention. Quoting an advertisement of a ball held in Calcutta on 15 November 1787 at which ice was supplied, Seton Karr, in his *Selections from the Calcutta Gazettes*, Volume I, stated: "The ice, it is presumed, must have come from the well-known ice-field at Hooghly, the only one known to have existed in the lower Provinces." The import of Wenham Lake ice, which, in its turn, was discontinued with the appearnace of machine-made ice on the markets, killed the ice industry of Hooghly.

Salt

During the Mughal rule, Hooghly was a very important mart for salt and saltpetre. The treaty between the East India Company and Najim-ud-daula executed in 1765 stipulated that the duty of 2½ per cent on salt was to be calculated at the "*rowana*, or Hughli market price." In 1826 the management of the salt *chaukis* or stations at Baduria, Gobardanga, Habra and Mullikbagh, all in 24-Parganas, was made over to the Collector of Hooghly, who got an honorarium of Rs. 200 per month for his additional duties. In 1836 a Government salt *gôlā* or warehouse, to hold about 50,000 maunds of salt, was established at Bhadreswar. In 1862 the Hooghly salt agency was incorporated with that in Tamluk.

Paper industry

The district was once well known for its paper industry. To it goes the credit of introducing the printing press in India which necessarily stepped up the local demand for paper. The early centres were located at Pandua and Saptagram. Toynbee says: "Pandua appears in 1838 to have eclipsed Satgaon, for the Magistrate reports that the paper made at the former is not only the best but also the cheapest. The Magistrates of Sylhet and other districts were constantly asking the Magistrate of Hooghly to procure and send them paper from Pandua."[4]

By 1912 the industry had severely declined and O'Malley stated in the Hooghly District Gazetteer published in that year that a few Muslims manufactured a little quantity of country-made paper at Niyatala and Mahanad near Pandua, at Khosla in Polba thana, and at Bali-Diwanganj in the Goghat P.S. "The manufacture is almost extinct," he said, "owing to the cheapness and superior quality of mill-made paper." With the subsequent establishment of modern paper mills at Titagarh and other places in the vicinity, the craft died out for good.

Chikan embroidery

The *chikan* (from the Persian *chikin* meaning art embroidery) industry flourishes in several villages under the Jangipara and Dadpur police stations. The patterns are first sketched out on paper which is then perforated along the lines of the drawings and smeared with a coloured liquid containing charcoal powder. The perforations allow the designs to be transferred to cloth on which delicate embroideries are worked by women artisans. Cheaper products consist of what is called 'cut-work' where small bits are chipped off from the cloth according to design and the edges are stitched by hand to produce beautiful motifs. Formerly, the handicraft was largely patronized by the Europeans in India and was also appreciated abroad particularly in Middle and South American countries where the local dealers used to go to trade in *chikan* goods. The overseas market has since shrunk but manufacturing units still exist in the villages of Anarbati, Atpur, Ajodhya and Jangipara in Jangipara police station where about 22 families are engaged in the craft, the average monthly income being Rs. 30 per worker. The most important centre is, however, located at Babnan and a few neighbouring villages within the Dadpur police station where about 4,000 persons earn their living from this handiwork. While the male members of an artisan family do the designing, tracing and peddling of the goods, the choice of colours, stitching, cutting and embroidering is left to the womenfolk.

Brass and bell-metal industry

The chief centres of brass and bell-metal industry were Boinchi (Pandua P.S.), Khamarpara (within the Bansberia municipality in Chinsura P.S.), Gholsara (Polba P.S.), Janai (Chanditala P.S.), Chanpadanga (Tarakeswar P.S.), Bali-Diwanganj and Kamarganj (Goghat P.S.). The workers at Gholsara used to manufacture *ghungurs*

(jingles) and small hinges. The Bansberia artisans had specialized in turning out saucers (*rekābi*), bowls (*bôgnā*), jugs (*gāḍu*) and toys for children while fishing reels of Janai and betel boxes (*pāndāns*) of Chanpadanga were also well known. Common utensils and pitchers were made in Bali-Diwanganj and Kamarganj and bell-metal ware at Boinchi. Bairagi families at Dipa in Serampore subdivision used to fashion brass and bell-metal bangles. The brass and bell-metal craft is in decline now all over the district due to competition of cheaper articles made of aluminium and lately of plastic materials.

Manufacture of fishing hook and thread

The manufacture of fishing hooks and fishing threads was once carried on in sizeable quantities at Boso, Dhaniakhali and other neighbouring villages in the Dhaniakhali P.S. With the gradual decay of the industry owing to competition from machine-made goods, most of the artisans have switched over to other professions leaving behind a few stragglers in their hereditary calling.

Boat-making industry

The boat-making industry must have been of great consequence in the days of glory of the Saptagram port, and latterly, of Hooghly. It has considerably shrunk now with small manufacturing units operating at Chandra, Sripur and Sukharia in Balagarh P.S.

Carpentry

Chairs, desks and wooden boxes were once made in large numbers by carpenters in French Chandernagore, Keota and Chinsura. Articles of ebony, chiefly hookah stems, were manufactured at Kamarpukur, Sripur, Badanganj and Kayapat, all in Goghat thana.

Other industries

Wicker baskets were and are made at Mayapur (Arambagh P.S.), Bandipur (Haripal P.S.) and Magra, and mats and various wicker articles at Singur, Serampore, Bandipur, Akri, Fatehpur (Pursura P.S.), Bora (Arambagh P.S.), Sonatikri and several other villages of the Khanakul P.S. Common pottery is turned out at every important village, the best-known articles coming from Baidyabati, Bhadreswar, Sugandhya and Chandernagore. Dyeing and colour-printing on cloth was carried on at Serampore, the handkerchiefs manufactured there being exported to Rangoon, Madras and Mauritius.

The old-time industries of the district are generally in decline today. Some of them which once centred round early European enterprise are now extinct; some, such as the brass and bell-metal craft, continue to languish while others like cotton handloom, bricks, tiles, carpentry and basket-making have been reorganized in recent years.

POWER

The growing need for electricity in a modern developing economy can hardly be over-emphasized. The per capita consumption of power in West Bengal, which was 66 kWh in 1957-58, was then the highest for any State in India and contrasted conspicuously with

the all-India average of 24 kWh only. The domestic consumption, however, forms a very small part of the total consumption in West Bengal where slow progress in rural electrification has deprived the small-scale industries of a much needed fillip. This has resulted in a regional imbalance stressed by the National Council of Applied Economic Research in their techno-economic survey of West Bengal. "On the one hand, Calcutta and its industrial conurbation have attained an order of development which is the highest in the whole of India and on the other hand, in the rest of the State, facilities for electricity supply are either inadequate or non-existent. In 1958-59, about 90 per cent of the total energy consumption took place within the licensed area of the Calcutta Electric Supply Corporation. . . Asansol, Durgapur, Jalpaiguri and Darjeeling accounted for almost the whole of the remaining energy consumption in the State."[5]

Partly due to this regional imbalance, the industrial area of the district has developed only along the banks of the Bhagirathi while the interior, even within a short distance from the conurbation belt, has languished for power starvation. For instance, in the Jangipara Development Block in the Serampore subdivision, which is at a distance of about 32 km. (20 miles), as the crow flies, from Calcutta, only 3 villages out of a total of 129 are electrified. The Block Development Officer reports that agro-based industries like food-preservation and production of cane-sugar have good prospects there if power is made available.

Power is supplied to the district by the West Bengal State Electricity Board, the Calcutta Electric Supply Corporation and several smaller private companies, the energy being received in bulk from the generators of the Damodar Valley Corporation and the Calcutta Electric Supply Corporation. Electricity is mainly used in the district for domestic consumption, lighting, industrial consumption and Railway electrification.

The West Bengal State Electricity Board was formed towards the end of the First Plan period and during the Second Plan top priority was given to rapid industrialization. The installation during the Third Plan period of a new thermal power station of 330 MW capacity at Bandel (Magra P.S.) by the West Bengal State Electricity Board was an indication of the urgency of avoiding power crisis in the rapidly growing Greater Calcutta area.

Though the D.V.C. and the C.E.S.C. have no generating stations within the district a number of their sub-stations function here for facilitating distribution.

An idea of the extent of power consumption in the district in 1961 may be had from the following tables[6] giving details of electricity supplied by all private companies taken together and the State Electricity Board.

POWER SUPPLIED BY PRIVATE COMPANIES IN HOOGHLY DISTRICT: 1961

Location of undertaking	Kilowatt hours sold	Consumption: Domestic: Heat & small power	Consumption: Domestic: Light & fan	Consumption: Commercial: Heat & small power	Consumption: Commercial: Light & fan
Bansberia	10,00,462	3,859	1,58,796	2,739	1,31,519
Chandernagore	20,60,197	62,308	14,07,234	—	851
Hooghly-Chinsura	24,23,556	61,355	10,91,677	44,700	5,71,326
Tarakeswar	65,337	10	46,576	—	2,684

POWER SUPPLIED BY STATE ELECTRICITY BOARD IN HOOGHLY DISTRICT: 1961

Location of grids	Kilowatt hours sold	Consumption: Domestic: Heat & small power	Consumption: Domestic: Light & fan	Consumption: Commercial: Heat & small power	Consumption: Commercial: Light & fan
Arambagh	1,19,742	1,908	33,591	904	47,032
Magra-Boinchi	6,61,227	14,671	1,22,663	12,743	1,88,151
Singur-Tarakeswar	21,54,139	5,458	17,817	7,216	1,39,189

Bandel thermal power project

The Bandel thermal power station was originally planned to relieve the acute shortage of electricity in the Greater Calcutta industrial area. It is situated at Tribeni, 56 kms. (35 miles) north of Calcutta and very close to the Adisaptagram station on the main line of the Eastern Railway. The site is also served by the Kalna-Katwa highway branching off north-east from the Grand Trunk Road at Adisaptagram. The project is estimated to cost Rs. 34.50 crores of which the foreign exchange component, in dollars, is Rs. 18 crores to be financed by a loan from U.S.A.I.D. The U.S.A. will also bear the rupee cost of the project through a loan from its PL 480 Fund in India. The power station covers an area of 116.95 hectares (289 acres) while the residential colony extends over 48·56 hectares (120 acres). It is scheduled to supply energy to various points in the State through a network of 132 kV transmission system interconnected with Durgapur Projects Ltd., the thermal power station at Durgapur, the Calcutta Electric Supply Corporation and the D.V.C. system. The four units of the plant were commissioned on 4.9.65, 18.10.65, 17.2.66 and 3.8.66 respectively.

The exact command area of the station is indefinite as it is working as an interconnected system covering the licensed areas of other power distributing concerns mentioned earlier. But by the end of the Third Five Year Plan it generated 160.85 million units which

were fed into the interconnected grid system. The construction phase of the project is almost over.

Rural electrification

West Bengal has 42,871 villages of which only 666 were electrified by the end of the Second Plan and 840 by 31 March 1965. In Hooghly district 92 villages and 14 towns were electrified by the end of November 1966.

Rural electrification being commercially an uneconomic proposition in the present stage of the country's development, the question of compensating the State Electricity Board, which is entrusted with the task, either through State subsidy or by allowing much more liberal terms for repayment of loans advanced by it is now engaging the attention of the West Bengal Government. Speedy rural electrification is a crying need as it constitutes the most important factor of agricultural progress. In the Hooghly district a fairly large number of deep tube-wells and lift irrigation pumps were installed by the end of the Third Plan but absence of electricity prevented many of them from operating.

The following table gives figures of electricity generated, purchased and consumed in the district in 1960-61.[7]

	(In thousand kWh)
Energy generated	142
Energy purchased	10,074
Energy consumed	8,485
(*i*) Industrial consumption	2,845
(*ii*) Non-industrial consumption	5,640

As has already been indicated, most of this energy was consumed in the urban areas. The progress of rural electrification in the district up to the end of November 1966 will be apparent from the following table.[8]

LIST OF ELECTRIFIED TOWNS AND VILLAGES IN HOOGHLY DISTRICT AS ON 30 NOVEMBER 1966

By Private Companies

Places Electrified	Police Station	Date of Electrification
TOWNS		
Sadar Subdivision		
1. Bansberia	Magra	1936
2. Hooghly-Chinsura	Chinsura	1922
Chandernagore Subdivision		
3. Bhadreswar	Bhadreswar	1938
4. Champdani	,,	1949
5. Chandernagore	Chandernagore	Before 1939
6. Tarakeswar	Tarakeswar	10.1.58

Places Electrified	Police Station	Date of Electrification
TOWNS (*contd.*)		
Serampore Subdivision		
7. Baidyabati	Serampore	1934
8. Konnagar	Uttarpara	1932
9. Kotrung	,,	1928
10. Rishra	Serampore	1932
11. Serampore	,,	1929
12. Uttarpara	Uttarpara	1926
VILLAGES		
Sadar Subdivision		
13. Banpara	Magra	—
14. Bajitpur	,,	5.8.61
15. Bhata	,,	10.1.58
16. Manaspur	Chinsura	—
17. Sahapur	Magra	5.8.61
18. Simla	Chinsura	—
By the State Electricity Board		
TOWNS		
Sadar Subdivision		
19. Pandua	Pandua	14.9.5
Arambagh Subdivision		
20. Arambagh	Arambagh	12.6.55
VILLAGES		
Sadar Subdivision		
21. Alikhoja	Magra	14.9.56
22. Bara Khejuria	,,	—
23. Gajaghanta	,,	14.9.56
24. Hansghara	,,	,,
25. Kola	,,	,,
26. Minajpur	,,	,,
27. Iswarbaha	Chinsura	—
28. Kajidanga	,,	21.5.62
29. Naldanga	,,	,,
30. Banka	Pandua	24.2.57
31. Boinchi	,,	24-2.56
32. Itachuna	,,	14.9.56
33. Khanyan	,,	24.2.66
34. Mahadevpur	,,	14.9.56
35. Sankpur	,,	,,
36. Bhanderhati	Dhaniakhah	15.8.63
37. Dhaniakhali	,,	6.3.64
38. Harpur	,,	,,
39. Samospur	,,	,,
Chandernagore Subdivision		
40. Dhitara	Bhadreswar	1.7.59
41. Khalisani	,,	,,
42. Dalugachhi	Singur	16.3.60
43. Diara	,,	Before 1951
44. Jalaghanta	,,	1.1.56
45. Kamarkundu	,,	22.9.62
46. Kismat Apurbapur	,,	1.11.56
47. Nasibpur	,,	Before 1951
48. Ratanpur	,,	1.11.56
49. Baladbandha	Haripal	31.3.62
50. Basudebpur	,,	14.2.59
51. Chak Ananta	,,	29.1.60
52. Chandinagar	,,	,,
53. Ehayatpur	,,	27.2.59
54. Gopinagar	,,	29.1.60
55. Hamiragachhi	,,	1961-62

Places Electrified	Police Station	Date of Electrification
VILLAGES (*contd.*)		
56. Haripal	Haripal	29.1.60
57. Jejur	,,	30.8.64
58. Khamarchandi	,,	29.1.60
59. Krishnapur	,,	,,
60. Paschim Jaykrishnapur	,,	,,
61. Raghunathpur	,,	,,
62. Baliguri	Tarakeswar	7.2.58
63. Chanpadanga	,,	1.2.63
64. Moktarpur	,,	,,
65. Sachak	,,	,,
Serampore Subdivision		
66. Dakshin Rajyadharpur	Serampore	1.5.61
67. Rishra	,,	1.7.59
68. Barbahera	Uttarpara	17.5.58
69. Khorda Bahera	,,	,,
70. Makhla	,,	1.8.58
71. Raghunathpur	,,	1.6.58
72. Baksa	Chanditala	—
73. Barijhati	,,	27.3.58
74. Begampur	,,	16.2.65
75. Chak Tajpur	,,	27.7.64
76. Chanditala	,,	27.3.58
77. Garalgachha	,,	28.3.58
78. Janai	,,	15.5.64
79. Krishnapur	,,	28.3.58
80. Makalpara	,,	27.3.58
81. Monoharpur	,,	26.3.58
82. Mrigala	,,	,,
83. Patul	,,	27.7.64
84. Seakhala	,,	,,
85. Ajodhya	Jangipara	—
86. Anarbati	,,	20.7.64
87. Atpur	,,	,,
88. Chandanpur	,,	—
89. Gulita	,,	1963-64
90. Jangipara	,,	—
91. Krishnapur	,,	—
92. Rajbalhat	,,	11.5.64
Arambagh Subdivision		
93. Jangalpara	Pursura	1.2.63
94. Pursura	,,	,,
95. Syedpur	,,	—
96. Joyrampur	Arambagh	—
97. Mayapur	,,	—
98. Dainan Anantapur	Khanakul	1.10.64
99. Ghagarpur	,,	,,
100. Khanakul	,,	,,
101. Radhakrishnapur	,,	1.3.64
102. Rajhati	,,	,,
103. Senhati	,,	,,
104. Uhidpur	,,	1.10.64
105. Kamarpukur	Goghat	25.2.63
106. Sripur	,,	,,

LIST OF VILLAGES ELECTRICALLY CONNECTED ONLY TO ENERGIZE LOCAL TUBE-WELLS

Places Electrified	Police Station	Date of Electrification
Sadar Subdivision		
1. Aydakismat	Balagarh	24.8.66
2. Babla	,,	—
3. Baheria	,,	24.8.66
4. Bakulia	,,	—
5. Basaki	,,	—

Places Electrified	Police Station	Date of Electrification
6. Basna	Balagarh	1.9.66
7. Belgachhi	"	25.8.66
8. Chhotonoka	"	—
9. Dhaksara	"	1.9.66
10. Dhobapara	"	—
11. Dumurdaha	"	27.8.66
12. Dwarpara	"	25.8.66
13. Ektarpur	"	—
14. Ghoshpukur	"	29.8.66
15. Gournai	"	1.9.66
16. Kamalpur	"	27.8.66
17. Kamargachhi	"	"
18. Mahmoodpur	"	—
19. Majdia	"	—
20. Mirdanga	"	29.8.66
21. Moshra	"	"
22. Sarinda	"	—
23. Digsui	Magra	26.7.66
24. Haira	"	"
25. Raipur	"	27.7.66
26. Devanandapur	Chinsura	26.7.66
27. Naksa	"	"
Arambagh Subdivision		
28. Bhangamora	Pursura	29.7.66
29. Childanga	"	22.7.66
30. Goldighi	"	20.7.66
31. Gopimohanpur	"	26.7.66
32. Kotalpara	"	"
33. Nimdangi	"	20.7.66
34. Shyampur	"	"
35. Sodepur	"	2.3.66
36. Amgaon	Arambagh	20.7.66
37. Asanpur	"	19.7.66
38. Balia	"	20.7.66
39. Banamalipur	"	19.7.66
40. Daulatpur	"	5.3.66
41. Dihibagnan	"	21.7.66
42. Hat Basantapur	"	24.7.66
43. Kapset	"	25.7.66
44. Kulberia	"	24.7.66
45. Madhabpur	"	21.7.66
46. Manikpara	"	25.7.66
47. Parbatichak	"	24.7.66
48. Parul	"	25.4.64
49. Pashim Kesabpur	"	19.7.66
50. Pirijpur	"	20.7.66
51. Pratapnagar	"	"
52. Prinsara	"	23.7.66
53. Purba Haripur	"	19.7.66
54. Purba Keshabpur	"	22.7.66
55. Purba Krishnapur	"	20.7.66
56. Ragpur	"	"
57. Salanpur	"	24.7.66
58. Sarati	"	19.7.66
59. Shyamgaon (Arunbera)	"	12.8.66
60. Shyamgram	"	20.7.66
61. Sitapur	"	21.7.66
62. Tajpur	"	20.7.66
63. Tilakchak	"	30.7.66
64. Anantanagar	Khanakul	21.7.66
65. Ganeshpur	"	"
66. Ghoshpur	"	22.7.66
67. Halen	"	30.7.66
68. Kaiba	"	"
69. Kaknan	"	22.7.66

Places Electrified	Police Station	Date of Electrification
70. Kumarhat (Chakrapur)	Khanakul	21.7.66
71. Nandanpur	,,	23.7.66
72. Raghunathpur	,,	30.7.66
73. Routhkana	,,	21.7.66
74. Sabalsingpur	,,	23.7.66
75. Anur	Goghat	14.4.66
76. Barul	,,	,,
77. Belepara	,,	15.5.66
78. Belun	,,	14.4.66
79. Chakari	,,	15.5.66
80. Khatogram	,,	26.7.66
81. Sitanagar	,,	14.4.66

Industries and Manufactures of the District

Minerals

There are no mines of any kind in the district but sand, a minor mineral, is exported in large quantities from Magra in particular as also from many other places in Polba, Singur and Haripal thanas. The Magra sand is of fine quality and appears to have been deposited there in the past by the Damodar and its distributaries before they changed their courses to their present beds. The sand is used for filtering as also in construction of buildings. Formerly, large country boats laden with this sand could be seen passing along the Magra Khal and the Bhagirathi on their way to Calcutta. It is now carried in lorries, a sight so common on the Grand Trunk Road. The trade employs several hundred persons in the district.

Large-scale industries

While there are no collieries or ship-building factories in the district, the heavy industries are represented by jute and cotton mills and undertakings connected with the manufacture of heavy chemicals, rubber and rubber tyres, automobiles, steel, rayon etc. besides the Bandel thermal power plant already briefly described. The jute and cotton mills are the oldest industrial units in the district, the former employing, as a group, the largest number of people.

The jute industry

Jute, the golden fibre of Bengal, sustained till about the middle of the 19th century a flourishing handloom industry which exported in 1850-51, 7,93,299 maunds of raw jute and 90,35,713 pieces of gunnies and gunny-cloth to Europe, North America, Malaya, Ceylon, Arabia and other foreign countries. The industry started facing competition from about 1835 when the first jute mill was established in Dundee. In the Hooghly district the first jute spinning mill, the Wellington Jute Mill, was established at Rishra in 1855 and power driven looms were installed in 1859 but the handloom industry continued to hold its ground until about 1884 ceasing to exist near about 1885. In 1866 the India Jute Mill was opened at Serampore; in 1873 the Champdani Jute Mill started work and by 1888 the Victoria and Hastings Mills were commissioned. These five mills employed over 11,000 hands daily when in full work.[9] By 1912 numerous jute mills were operating in the district, the position of the largest of which will be apparent from the following table.[10]

Name of jute mill	Location	Year of opening	No. (in 1908) of Looms	Spindles	Average daily number of operatives in 1908	Outturn in 1907-08 (mds.)
Champdani	Champdani and Baidyabati	1873	482	8,764	3,200	3,28,583
Dalhousie	Bhadreswar	1905	432	9,030	2,800	3,38,990
Hastings	Rishra	1875	750	15,580	5,822	6,09,249
India	Serampore	1866	700	9,936	3,267	4,55,665
Victoria	Telenipara	1885	1,037	22,760	7,387	6,76,065
Wellington	Rishra	1855	277	5,544	2,911	2,84,081

In 1947 there were 112 jute mills in India of which 101 were in West Bengal, the rest being located in Bihar, Uttar Pradesh and Madras. In the same year the total loomage in West Bengal increased to 65,227, accounting for about 50% of the total world jute loomage and employing 92.4% of the total number of jute operatives in the country.

The jute industry of the district owes its phenomenal growth to the initiative and business acumen of the Scotch industrialists of the last century of whom the name of Sir Thomas Duff deserves special mention. Even in its earliest stages the industry was collectively organized and the Indian Jute Mills Manufacturers' Association was formed in July 1884. The body was renamed as the Indian Jute Mills Association (I.J.M.A.) in 1902 which name it still retains. Its purpose has always been to improve trade, exercise internal discipline among the units and enforce collective action to promote and protect the common interests of the members. In 1947 out of 112 jute mills in India as many as 103 were its members and of these 97 were in West Bengal. Since 1947 there have been changes in the number of mills in the district; some uneconomic units had to be closed down while working hours in others were increased.

It may be of interest to note the position of the industry in Hooghly district immediately after Partition which took away the jute-growing areas from the easy reach of the manufacturing centres. In 1949 there were 15 jute mills in the district providing employment to 58,286 persons; the corresponding employment figures for 1946 and 1947 were 56,665 and 57,028. It cannot, therefore, be said that the partition of the country led to any shrinkage of the industry. The total loomage also increased although on several occasions certain percentages of looms had to be sealed to cope with the vagaries of supply of raw jute and of demands from overseas markets. With the imposition of special export taxes by Pakistan on raw jute supplies to India, the industry faced a crisis. At the instance of the I.J.M.A. the Govern-

ment of India sanctioned reduction of output of jute goods by introducing periodical closure of mills, sealing of looms and increasing the acreage under jute in West Bengal, Assam, Bihar, Orissa and U.P. Substitute fibres such as mesta were also used extensively.

Before Independence foreign interests, mostly Scotch, dominated the industry. Indian infiltration started since the twenties and gained considerable momentum after Independence. At present Indians predominate in this vast industry and it is their voice which is most audible in the deliberations of the I.J.M.A.

As is natural in a monopoly industry, the entrepreneurs had paid little attention to modernize their plants and equipments—a fact which assumed ominous proportions with the establishment of jute mills in Pakistan with the latest machines. The Indian industry was thus forced to embark upon a big programme of rationalization by importing as also making at home the requisite machinery which indirectly gave a fillip to new engineering industries.

The total number of jute mill workers in the district was 47,261 in 1951, 43,906 in 1955, 38,493 in 1960 and 50,048 in 1964. The average daily employment of 6,250 persons was the highest for 1964 in Samnuggar North Jute Mill at Bhadreswar while that of the Victoria Jute Mill (Works No. I) at Telenipara was the lowest with 667 persons. Corresponding figures for 1964 for some of the important mills were as follows: India Jute Mill—3,621; Wellington Jute Mill—3,975; Dalhousie Jute Mill—3,621, Victoria Jute Mill (No. I & II)—4,939; Hastings Jute Mill—5,040 and Angus Jute Mill—5,104.[11]

Cotton mills

In 1965 there were 9 cotton mills in the district of which Bengal Luxmi Cotton Mills Ltd., Serampore; Bangeswari Cotton Mills Ltd., Rishra; Rampuria Cotton Mills Ltd., Serampore (Mahes); Sri Durga Cotton Spinning & Weaving Mills Ltd., Konnagar; Bengal Fine Spinning & Cotton Mills Ltd., Rishra were the foremost. From the location of the mills it is apparent that the industry is concentrated in the Serampore subdivision of the district.

The Bengal Luxmi Cotton Mills Ltd., is the oldest concern which started its career with the taking over of the Lakshmi Tulsi Cotton Mill under new management in the days following the *Swadesi* movement of 1905. In 1908 it employed, on an average, 1,026 hands per day and had over 200 looms with 26,000 spindles, the outturn being 31,617 maunds. Reorganized in 1906, the company had a paid-up share capital of about Rs. 12 lakhs in 1912. The mill employed 3,029 persons[12] in 1959, the corresponding figure for 1964 being 2,596.[13]

The remaining cotton mills provided employment to 7,998 persons in 1959 of whom 1,611 were in Bangeswari Cotton Mills, 2,264 in Rampuria Cotton Mills, 1,054 in Sri Durga Cotton Spinning & Weaving Mills and 1,170 in Bengal Fine Spinning & Weaving Mills.[14]

Large-scale industry: some important units

Except the Bandel thermal power plant, there is no large-scale industrial establishment in the district in the public sector. Among those in the private sector, the following are the most important and deserve individual treatment.

(*a*) Hindustan Motors Ltd. at Uttarpara, the largest automobile manufacturing unit in the country.

(*b*) The Dunlop Rubber Co. India Ltd. at Sahaganj, the biggest of its kind in Asia producing rubber tyres, tubes and various other rubber products.

(*c*) The Alkali & Chemical Corporation of India Ltd. at Rishra, the first in India to produce polythene.

(*d*) Jaya Shree Textiles and Industries Ltd. at Rishra manufacturing textile goods, specially flax goods.

(*e*) Kesoram Rayon at Bansberia, producing rayon grade pulp.

(*f*) J. K. Steel Ltd. at Rishra producing jute baling hoops etc.

Hindustan Motors

Hindustan Motors,* came into existence in 1942 at Port Okha in the then Baroda State. In 1944-45 an agreement was reached between it and Messrs Morris Motors Ltd. of the U. K. for technical collaboration in assembling and progressive manufacture of various components of Morris-10 cars. The construction of the factory off Uttarpara, to the adjacent west of the main line of the Eastern Railway, was started in 1946 and the first phase was completed in 1950 when the registered office of the company was transferred to West Bengal and the assembling of cars and trucks was shifted from Okha to Uttarpara, the Okha plant being closed down. In 1954 the company started producing Landmaster cars but from 1957 it switched over to the Hindustan Ambassador model. An agreement was signed the same year with General Motors Corporation of the U.S.A. and in 1958 with Vauxhall Motors of England for progressive manufacture of Bedford trucks. In 1959 an agreement was arrived at with Marion Power Shovel Co., Ohio, U.S.A., for shovel manufacture while in 1960 an agreement was signed with M.A.N., West Germany, for producing O.H.T. cranes. With improvements made at home and technical collaboration received from abroad, the company has been able to fabricate indigenously about 95 per cent of the components of cars and about 80 per cent of the components of trucks. Important components like the engine, gear box, rear axle, front suspension, body etc. of cars and gear box, front and rear axles, chassis frame, radiator etc. of trucks are now manufactured at Uttarpara. Of late, the factory is producing 5407·7 cubic cm. (330 cubic inch) diesel and 5407·7 cubic cm. (330 cubic inch) petrol Bedford engines.

* The information given here about the company was supplied by its Assistant Factory Manager

In 1966 the authorized capital of the company was 20 crores and subscribed capital about 8 crores and 20 lakhs of rupees; fixed assets were valued at Rs. 27,28,00,000 and the shareholders numbered 24,531. Hindmotor, the nearest railway station at a distance of 12 km. (7½ miles) from Howrah on the main line of the Eastern Railway, is situated practically at the factory gate. The sprawling installation spreads over 299·6 hectares (740 acres) of land of which the covered area comprises 2,22,966·98 sq. m. (24,00,000 sq. ft.) while housing estates occupy about 67,254·24 sq. m. (7,00,000 sq. ft.).

The products of the company include Hindustan Ambassador 4-door cars, Hindustan Bedford trucks, Hindustan Bedford SB extra-long buses, stationary 8/10 H.P. diesel engines, steel castings, excavators, electric overhead travelling cranes, fabrication of bridges, heavy-plate girders, welded pipes, spilway gates, ore-handling equipments, pressure vessels, chimneys, etc. The following table shows the total annual output of some of the important products for 1963-64,

Products	1963-64	1964-65	1965-66
Cars	10,699	16,000	16,500
Trucks	5,417	5,717	4,000
Shovels	10	5	12
Cranes	16	35	50
Structural (in tonnes)	2,974	3,253	1,830

1964-65 and 1965-66. With recently-expanded capacity, the company is in a position to manufacture annually between 20,000 and 24,000 cars since 1966. A new plant for the mnufacture of engines for cars and commercial vehicles has been added in November 1968 with an annual installed capacity of 38,000 car engines and 15,000 truck engines.

The total strength of the staff in 1966 was 11,182 of whom supervisory and clerical personnel numbered 196 and 958 respectively. In the same year there were 8,735 workers of whom skilled, semi-skilled and unskilled workers were 2,369, 5,557 and 809 respectively.

The residential colony attached to the factory accommodates about 3,000 workers, supervisory and other staff who with their family members number about 7,000. It has all modern civic amenities and essential commodities are available at the local market centre. In the modern two-storied auditorium-cum-canteen built at a cost of Rs. 20 lakhs subsidized food can be served to 200 employees at a time. Cultural programmes, cinema shows are regularly held in the auditorium. The well-equipped hospital, staffed by qualified doctors, compounders and nurses, has 25 indoor beds and an air-conditioned operation theatre. A higher secondary school imparts education to 700 students in science and humanities. Recreational facilities include

two clubs—one for the staff and the other for the workers. Various sports and cultural activities are arranged from time to time by the staff club which is managed by an elected body while the workers' club offers opportunity for both indoor and outdoor games. There is a library attached to each of the clubs.

The management has given recognition to the trade union sponsored by the Indian National Trade Union Congress. Important matters pertaining to the mutual interest of the management and the employees are jointly discussed and decided.

The company serves the consumers through a countrywide network of dealers, sub-dealers and authorized service stations. The heavy engineering products are distributed through 12 distributing agencies and their branches. Besides, a large number of representatives all over India attend to sales, service and supply of spare parts.

The Dunlop Rubber Co.

The Dunlop Rubber Co. (India) Ltd.* is situated at Sahaganj on the Bhagirathi, 4·8 km. (3 miles) north-east of Bandel, the nearest important station on the Eastern Railway main line. The site comprises 96·3 hectares (238 acres) in all of which 18·4 hectares (45.5 acres) represent the area of the factory which has a total covered area of 85,640·4 sq. m. (9,21,827 sq. ft.).

The company took over a derelict jute mill in 1935 and transformed it into India's first large-scale tyre plant within a year. Steady progress, both technical and otherwise, has not only increased the landed assets of the firm from a mere 36·4 hectares (90 acres) to the present dimensions but has made the unit the largest and most modern factory in all Asia engaged in the manufacture of rubber and rubber products. It is interesting to note that with the fall of Singapore during the Second World War, the Sahaganj factory became strategically very important as the main supplier of tyres and similar other sinews of war to the South East Asia Command and that the installation was subjected, on 15 January 1943, to a heavy air raid by the Japanese who dropped 12 bombs killing 10 employees.

Sahaganj started with the manufacture of tyres and tubes for cycles, cars and animal-drawn vehicles but soon added truck and bus tyres to its range. During the Second World War, in spite of enormous difficulties, not only production never ceased in the factory but it started manufacturing for the first time in India aero tyres to equip the spitfire and hurricane fighter planes. By 1954 Sahaganj placed on the market 'Dunlopillo', the versatile latex foam cushioning so widely used in hospitals, buses, trains, public buildings and households. Another notable Dunlop 'first', brought out in 1965, was the PVC fire-resistant and anti-static conveyor belting for use in coal mines. The use of such belting underground has now been made mandatory to reduce fire hazards. This item is expected to save the country a good

* The information given here about the company was supplied by its General Works Manager.

amount of foreign exchange. Other important industrial rubber products made by the company are Vee-belts and transmission belting, important for power transmission in all types of industry, big or small. Dunlop has also developed a range of industrial hoses. The table below gives a picture of the annual production of the company for the three years from 1963 to 1965.

ANNUAL PRODUCTION OF THE DUNLOP RUBBER CO.: 1963-65

Products	Unit	Annual Production		
		1963	1964	1965
TYRES				
Car & Small Giant	piece	3,76,654	3,99,705	4,49,620
Truck & Army	,,	3,35,553	3,32,753	2,91,784
Scooter & Barrow	,,	76,601	92,601	1,23,942
Tractor & O.T.R.	,,	9,871	11,719	20,219
Aero	,,	14,643	14,089	10,438
Cycle	,,	72,20,093	81,05,552	78,09,494
Trolley	,,	84,956	1,00,817	11,96,032
TUBES				
Car, Giant, Tractor and O.T.R.	,,	10,26,739	10,93,560	51,489
Aero	,,	3,699	4,630	2,178
Cycle	,,	92,87,518	91,35,365	91,84,915
CYCLE RIMS	,,	23,09,065	24,55,952	25,24,718
INDUSTRIAL PRODUCTS				
Dunlopillo	kg.	9,76,366	9,74,929	9,94,067
Conveyor belting	metre	94,147	1,17,000	1,75,526
Transmission belting	,,	5,84,200	9,23,814	9,84,554
Fan & Vee-belts	piece	7,66,460	8,43,193	9,11,325
Braided hose	metre	12,79,629	12,95,809	16,18,005
ACCESSORIES				
Tread rubber	kg.	4,47,320	5,12,888	6,77,942
Flaps	piece	2,75,651	3,40,991	3,08,415
Cycle Valve tubing (0·5 kg.)	roll	24,977	23,539	23,943
Repair compound	kg.	97,087	99,671	89,758
Patch strip	dozen	67,660	73,321	82,386
Vulcanizing solution & T.R.H. paint	litre	2,60,032	2,37,950	2,66,583
Rubber solution:				
Tube No. 1	dozen	7,49,616	8,82,491	9,63,002
,, No. 4	,,	2,80,790	2,96,715	3,97,965
Bulk	litre	71,937	63,601	70,937
Adhesive solution	,,	2,25,297	2,67,430	3,46,181

The authorized share capital of the company in 1966 was Rs. 12,50,00,000 of which preference, ordinary and unclassified shares accounted for Rs. 70,00,000, Rs. 8,00,00,000 and Rs. 3,80,00,000 respectively. The approximate number of shareholders for the same year was 6,923 and the book value of fixed assets on 31.12.1965 was Rs. 8,25,00,000.

In June 1966 the factory employed 5,552 persons of whom 49 were officials, 49 managers, 142 senior supervisors, 1,056 staff, 3,937 operators and 319 special appointees. The earnings of operators

vary between Rs. 140 and Rs. 550, the average being Rs. 300 per month. Staff and special appointees are paid on a monthly basis and include clerks of all categories, watch & ward and fire brigade personnel, canteen cooks, *masālchis*, *mālis*, sweepers and others. For them the salary is between Rs. 75 (basic 'A' grade—minimum) and Rs. 500 (basic 'D' grade—maximum). The rate of dearness allowance is about 155% of the basic pay. Welfare amenities provided by the company include housing, hospital facilities, subsidized canteen, arrangements for indoor and outdoor games, cinema, library, education for children, supply of uniforms and milk and of cool drinking water in summer etc. An annual bonus is paid to all employees at a rate mutually settled between the management and the workers' representatives. Facilities of contributory provident fund and gratuity are also available. In the event of death or retirement of a factory worker on medical grounds, it is the company's policy to make provision for his son or other dependent, provided there is a vacancy and the candidate is suitable. About 50 per cent of the employees are provided with residential accommodation. The company maintains a 28-bed hospital the outpatients' wing of which was visited by 215 employees and 175 families on an average per day up to October 1965. Thereafter, the numbers have slightly decreased owing to the introduction of the Employees' State Insurance scheme in the district since 31.10.65. The hospital is equipped with a modern airconditioned operation theatre. Clinics for babies, family planning facilities and ante-natal care are provided for the members of the employees' families. A higher secondary school (Bengali medium), a high school (Hindi medium) and a kindergarten school (English medium), located within the factory campus, cater to the educational needs of employees' children.

Of the three registered trade unions, the company recognizes the Dunlop Rubber Factory Labour Union alone which is affiliated to the Indian National Trade Union Congress. The office-bearers of this union are all employees excepting the president who is an outsider. Most of the issues affecting employer-employee relations are settled through negotiations.

The Alkali & Chemical Corporation of India

The Alkali & Chemical Corporation of India Ltd.* was registered in 1937 and started its operations in 1940 with the commissioning at Rishra of the first electrolytic plant in India to produce liquid chlorine and caustic soda. New ranges of products were added by 1952 with the commencement of manufacture of synthetic and nitrocellulose paints and technical B.H.C. A major expansion took place in 1959 with the establishment of the first plant in India to manufacture polythene. Another new range of products was added—again for the first time in India—with the production of rubber

* The information which follows was officially procured from the management of the company.

chemicals since 1963. Further extension of the plant with a view to bringing out new products still continues.

On 31 March 1966 the authorized and subscribed capital of the company was Rs. 6 crores and Rs. 3.41 crores respectively. Fixed assets (gross) were valued at Rs. 8.39 crores, allowing for depreciation of Rs. 4.01 crores for the same year. The number of shareholders was 2,480 and bonus shares amounting to Rs. 1.24 crores were issued to persons who were registered shareholders of the company on 31.3.66.

The factory is located at Rishra, 17 km. (11 miles) from Howrah on the main line of the Eastern Railway and covers an area of about 40·5 hectares (100 acres). In 1966 its employees of all categories numbered 1,886, of whom 1,155 were workers, 587 belonged to general establishment and 144 constituted the managerial staff.

The essential operatives are provided with accommodation at the factory site. About a mile away is a housing estate of the company which houses one-third of the workers and supervizing staff. There is also a canteen for workers, a primary school for the children of the staff and a sports club and dispensary for the employees.

The production of the Company in 1963-64 and 1964-65 is shown in the following table. Raw materials are obtained locally and some are also imported.

Products	Unit	Production		Licensed capacity
		1963-64	1964-65	
Paints	million litres	4·8	5·0	5·9
Polythene	tonnes	3,600	9,640	8,500
Rubber chemicals	,,	1,200	1,800	2,770
Caustic liquor 48% (expressed as 100%)	,,	8,131	7,940	7,041
Liquid Chlorine	,,	6,295	5,919	5,814
Hydrochloric Acid 30%	,,	4,455	5,775	4,300
B.H.C. Technical	,,	1,699	2,321	2,100
Alfloc powders and briquettes	,,	526	429	508

Although there are two trade unions of workers since 1956, the one affiliated to the Indian National Trade Union Congress is recognized by the management. Excluding the president and the vice-president, the office-bearers of this union are employees of the company. Meetings between the representatives of the management and the union are held twice almost every month, when disputes relating to the day-to-day work of the factory are discussed and settled. Unresolved differences are referred to the conciliation agencies set up by Government.

Jaya Shree Textiles & Industries

Jaya Shree Textiles & Industries Ltd.* was incorporated in 1944 and started production in 1949. It was a pioneering venture and even to this day it is the only concern in India manufacturing flax goods. The company also turns out fire-fighting hoses, canvas, tarpaulins, water-bottles, webbings and almost all types of linen threads and twines used by a number of industries, the Defence Department, the Railways etc. The company has also taken up the manufacture of various other textile articles of industrial and consumer interest from cotton, staple and wool as well.

In 1966 the cotton-spinning department of the company had about 25,000 modern spindles, spinning yarns from 6 to 50 counts and producing various industrial yarns, cotton twines and threads, heavy cotton canvas, filter cloth and tarpaulins. In the man-made yarn section, viscose staple yarn, nylon and terylene yarn, staple blankets, lohis and nylon and terylene filter cloth are the usual products. In the wool section hair belting yarn, machinery cloth and other industrial cloths like lapping cloth, sizing flannel, clearer cloth, plaiding cloth and interlining cloth are manufactured.

The main factory of the company is located at Rishra where it has its registered office as well. The secretaries and treasurers are Messrs Birla Brothers (Private) Limited. In 1965 the company employed about 4,000 persons and its annual turn-over amounted to about 4 crores of rupees. Many of its technical and other hands have been trained abroad. The goods being currently exported overseas are cotton yarn, cotton canvas, paulins and flax twines for manufacture of heavy and light-duty boots and shoes etc. A modern plant for the manufacture of H.T. & L.T. electric insulators is under erection now. The company also intends to establish a malleable casting foundry as well.

Kesoram Rayon

Kesoram Rayon† is a unit of Messrs Kesoram Industries & Cotton Mills Ltd., which started manufacturing rayon yarn towards the end of 1959, initially with a production capacity of 7·1 tonnes (7 tons) per day which increased to 12·2 tonnes (12 tons) a day in 1961 when the company also began turning out transparent paper. A moisture-proofing plant was added to the establishment at the end of 1963.

The factory is located at *mauzā* Raghunathpur adjacent to Kuntighat Railway station (near Tribeni) on the Bandel-Barharwa Loop of the Eastern Railway. The site comprises about 40·5 hectares (300 bighas) of which about 7·4 hectares (55 bighas) are covered by the factory. Most of the raw materials are imported and the products consist mainly of rayon yarn and transparent paper (plain and moisture-proof) besides auxiliary materials like sulphuric acid, carbon-

* The information which follows was procured from the management of the company.

†The information given here about the company was supplied by its Personnel Officer.

di-sulphide, sodium sulphate etc. The annual production figures for three years from 1963-64 to 1965-66 are given in the table below:

Products	1963-64	1964-65	1965-66
	(In tonnes)		
Rayon yarn	4,844	4,746	4,687
Transparent paper	1,133	1,159	1,828
Sulphuric acid	9,212	9,284	7,567
Carbon-di-sulphide	2,003	1,839	1,960
Sodium sulphate	2,146	2,250	2,667

In 1966 the company employed 2,370 persons of whom skilled, semi-skilled and unskilled workers numbered 990, 120 and 670 respectively. The managerial, supervisory and clerical staff consisted of 10, 230 and 170 persons. Amenities included annual bonus to all eligible employees, free accommodation to workmen (with free water and electricity), accommodation for staff at a nominal rent, and subsidised meals from the company's canteen for staff and workers. Free supply of milk to workers in some production departments and medical facilities during emergencies are also provided. A school, a club and a library cater to the needs of the employees.

The Kesoram Rayon Workmen's Union, affiliated to I.N.T.U.C. and having a membership of about 1,500 in 1966, is recognized by the management which solves its labour disputes through bipartite and tripartite agreements and occasionally through arbitration.

J. K. Steel

Established in 1952, J. K. Steel Ltd.* is the only company of its kind in India manufacturing jute-baling hoops. Since 1957 it has added cold rolled strips and wire ropes to its production range. In 1962 the company started fabricating pulley blocks and electric hoist blocks in collaboration with a leading Finnish firm. It has since doubled its steel wire-rope plant and a two-fold expansion of its cold rolling mill is in hand. It is in possession of industrial licence for the manufacture of seamless steel pipes for which negotiations are in progress.

In 1966 the company's authorized capital was Rs. 1.5 crores and subscribed capital Rs. 50 lakhs. The fixed assets were valued at Rs. 1,72,94,377 and shareholders numbered 600. The factory with its own railway siding is situated at Rishra, 17 km. (11 miles) from Howrah on the Eastern Railway main line. The factory site extends over 13·2 hectares (98 bighas) of land of which 30,752·4 sq. m. (3,31,016 sq. feet) is covered area. The products are jute-baling hoops, cold rolled strips, box strappings, steel wires, steel-wire ropes,

*The information given here about the company was supplied by its Works Manager.

chain pulley blocks and electric hoist blocks. Raw materials, except for steel-wire rope and high-carbon wire rods, are available from indigenous sources such as Tata Iron & Steel Co. Ltd. etc. Production during three years from 1963-64 to 1965-66 is shown in the following table.

Items	Unit	1963-64	1964-65	1965-66
Jute-baling hoops	Tonnes	7,591	10,780	10,139
Cold rolled strips box strappings	,,	2,311	2,090	2,934
Chain pulley blocks	Piece	188	1,204	589
Electric hoist blocks	,,	Nil	166	203
Wire rope	Tonnes	1,478	1,343	1,559

The plant capacity in 1966 was 18,000 tonnes of jute-baling hoops, 4,800 tonnes of cold rolled strips, 6,000 tonnes of wire rope, 3,600 chain pulley blocks and 500 electric hoist blocks.

The company employed 899 persons in 1966 of whom unskilled, semi-skilled, skilled and highly skilled workers numbered 379, 143, 362 and 15 respectively. The strength of the managerial staff was 12 and that of the technical staff 70. There were besides 79 clerks. Average wages (over a period of 5 years from 1961 to 1965) of workmen in various categories are shown in rupees in the table below.

Year	Category of Workers			
	Unskilled	Semi-skilled	Skilled	Highly skilled
1961	69	76	106	146
1962	78	84	115	162
1963	83	89	121	175
1964	100	107	139	197
1965	103	110	143	203

Besides wages, production and annual bonus are also paid which amount to about 20 per cent of the basic wages. There is a well-furnished recreation centre and the company organizes sports, games and cultural activities from time to time.

None of the two trade unions, one affiliated to the A.I.T.U.C. and the other to the I.N.T.U.C. is recognized by the management which takes recourse to the customary labour laws for settling disputes.

Other industrial units

Besides the foregoing industries, the Tribeni Tissues at Tribeni, the Hindusthan National Glass Manufacturing Co. at Rishra and the Angus Works near Bhadreswar also deserve mention.

Tribeni Tissues

Messrs. Tribeni Tissues Private Ltd.* set up a mill in 1950 by the Bhagirathi at a distance of 2·4 km. (1½ miles) from Tribeni, the nearest railway station on the Bandel-Barharwa loop line, for producing annually 2,400 tonnes of cigarette and other light-weight speciality tissues. The initial plant capacity, exceeded in 1954, has since been increased to 5,700 tonnes per annum and the factory now exports about 15 per cent of its total production abroad. The essential fibrous raw material is sun hemp, grown extensively in certain districts in eastern U.P. and also in some quantities in Bihar and West Bengal. Excepting wood pulp, machine clothing, tartaric acid and a proportion of the engineering spares, the rest of the raw materials are obtained locally.

The various grades of tissue manufactured by the company are cigarette tissue for consumption at home and abroad as also carbonizing, news airmail, wax match base, razor blade wrapping, toil lining, overlay, and yellow cork tipping base tissues. Production in tonnes during 1963, 1964 and 1965 is given in the following table.

	1963	1964	1965
Cigarette tissue (Export)	1,030	1,160	860
Cigarette tissue (Home)	1,790	1,830	2,620
Carbonizing tissue	590	450	510
Commercial tissue	1,450	1,680	1,460
Total	4,860	5,120	5,450

The mill also manufactures precipitated calcium carbonate for its own use, the excess being sold on the market. In 1965 such sales amounted to 1,030 tonnes.

The authorized and subscribed share capitals of the company were Rs. 2 crores on 31.12. 65, the fixed assets on the same date being Rs. 3.73 crores. In 1966 the company employed 730 persons.

Hindusthan National Glass Manufacturing Co.

The Hindusthan National Glass Manufacturing Co. Ltd.† produces from its factory at Rishra glass bottles of various shapes and sizes ranging from penicillin vials to 24 oz. liquor bottles, both in white and amber glass. The raw materials, such as silica sand, soda ash, limestone and dolomite, are procured from within the country. The present plant capacity is 81·3 tonnes (80 tons) per day and annual production in

*The information about the company given here was supplied by the Mill Manager of the factory.

†The information given here about the company was procured from its management.

1964-65 and 1965-66 was 12,880·3 tonnes (12,677 tons) and 18,175·9 tonnes (17,889 tons) respectively. In 1966 the factory employed 586 workers of whom highly skilled, skilled, semi-skilled and unskilled workers numbered 18, 184, 164 and 220 respectively. In the same year daily wages varied between Rs. 3.25 and Rs. 4.50 for unskilled labourers to Rs. 5.50 and Rs. 10 for highly skilled workers. The authorized share capital of the company is Rs. 1 crore, while the subscribed share capital amounts to Rs. 62.3 lakhs. The gross fixed assets of the Rishra factory are valued at Rs. 1.27 crores. The number of shareholders is 46. In 1964 the company set up a second glass container factory at Bahadurgarh, Punjab, with a production capacity of 50·8 tonnes (50 tons) per day.

Angus Works

The Angus Works* at Angus (Bhadreswar P.S.) under the management of Messrs Braithwaite & Co. (India) manufactures railway wagon components, rolls for road rollers, bridge bearings, cranes, steel forgings, cast iron and non-ferrous castings, machines for fabricating stone crusher components, air and gas compressor parts, mining machinery parts and jute and general engineering spare parts. Raw materials used are all of indigenous origin. The annual production capacity of the plant is 60 cranes, big and small, 840 tonnes of steel forgings of various sizes and designs, 5,400 tonnes of cast iron and 120 tonnes of non-ferrous castings of diverse specifications.

In 1965 the workshop employed 1,609 persons of whom 1,070 were workers and the rest supervisory, clerical and other staff. The minimum basic wages, exclusive of annual bonus and dearness allowance linked to the Consumer Price Index, for highly skilled, skilled, semi-skilled and unskilled workers were Rs. 110, Rs. 75, Rs. 40 and Rs. 35 respectively. A proposal is now under consideration for the manufacture of certain other machine tools in the factory.

Industrial organizations

Most of these large-scale industrial units have their registered offices in Calcutta and are affiliated to different Chambers of Commerce. As such, there is no separate employers' organization in the district. Rotary Clubs, located at Hooghly and Serampore usually serve as the meeting places of the employers or their representatives. No industrial or commercial journal is published from the district except a few 'house magazines' brought out by some of the bigger undertakings which mostly cater to the interest of individual units and have very limited circulations.

The large-scale industries are all located along the bank of the Bhagirathi from Uttarpara to Tribeni as this area is well served by road, rail and river transport connecting it with the great market and port city of Calcutta. Other factors contributing to the industrial growth of this region are supply of electricity by the Calcutta Electric

*The information given here was supplied by the Commercial Superintendent of Angus Works.

Supply Corporation up to Bhadreswar at a low price and abundance of cheap labour. Most of the industrial products find their way first to Calcutta and are thereafter distributed all over the country or abroad.

Small-scale industries

Small-scale industries consist of rice mills, cold storages, automobile servicing, printing presses, distilleries, power looms, iron foundries, manufacture of automobile parts and plastic mouldings, non-ferrous and alloy castings, machine components, jute spiral needles, fencing wires, flooring tiles, brass locks, chemicals and pharmaceuticals, steel trunks, G.I. pipes, soap, essence and perfumes, optical lenses, dyestuff and pigments etc.

Rice mills

In 1951 there were 21 rice mills in the district but by 1964 the number had increased to 50. Some 20 of them are located within the Pandua P.S. while the others are to be found at Rishra, Baidyabati, Boinchi, Serampore, Bandel, Simlagarh, Chandernagore, Raghunathpur, Nayasarai, Arambagh and Dhaniakhali.

Cold storages

Hooghly is the foremost potato-growing district in West Bengal where cold storages play a vital role in agricultural progress as they store hardly anything except potatoes. The phenomenal growth of the industry in recent years will be evident from the fact that in December 1963 there were 30 cold storages and 8 more under construction in the district while the corresponding figures for March 1965 were 47 and 4. During 1962-63, the State Warehousing Corporation set up at Tarakeswar the biggest cold storage in the district with a capacity of 39,000 maunds with provision for expansion up to 60,000 maunds. It is the first cold storage to be built in the public sector anywhere in India. Of the more important privately-owned cold storages existing in the district in 1964, mention may be made of the Chowdhury Cold Storage at Belechunga in Haripal P.S., Bengal Cold Storage at Baidyabati, Ambica Cold Storage at Sheoraphuli which cost their owners investments ranging between 10 and 14 lakhs of rupees for each unit.

Distilleries

The Serampore Distillery is the first Bengali-owned concern of its kind in India. A brewery in the public sector run by the Excise Department of the State Government is located off Konnagar.

Jute spiral needles

Jute spiral needles produced by a unit at Baidyabati have replaced the imported needles in many mills. The State Government has extended necessary assistance to this unit with regard to the procurement of raw materials.

The work relating to the development of small-scale industries involving a block capital not exceeding 5 lakhs of rupees is entrusted to a coordinating and supervisory body headed by the District Industrial Officer functioning directly under the State Directorate of Industries. The groupwise numbers of industrial establishments in the district registered with the Directorate of Industries as on 31.3.65 are shown on the following page.

Type of small-scale industry	No. of units registered up to 31.3.65
Food & beverages	23
Textiles	10
Chemicals & Chemical products	20
Non-metallic mineral products	9
Basic metal industries	105
Metal products	28
Machinery (except electrical)	12
Electrical machinery & apparatus	9
Plastic products	13
Others	37
Total	266

Most of these industrial units are located within the municipal areas of Kotrung, Konnagar, Rishra, Serampore, Baidyabati, Champdani, Gourhati, Bhadreswar, Chandernagore, Hooghly-Chinsura and Bansberia.

Cottage Industries

Handloom weaving

After the cessation of the East India Company's commercial operations, cotton handloom weaving severely declined owing to the competition of imported piece-goods. In the old Hooghly District Gazetteer published in 1912, O'Malley wrote: "The number of persons engaged in cotton weaving decreased by about 33 per cent in 20 years, and those who clung to their old handicraft had for the most part to supplement their earnings from other sources, such as agriculture, service, etc. In towns, what little weaving there was owed its survival largely to the use of an improved handloom, known as the Serampore handloom, which was introduced from Chandernagore."[15]

The industry, however, received a fresh lease of life during the *Swadesi* movement following the partition of Bengal in 1905. There was a growing demand for indigenous products and the suffering handloom weavers of Hooghly benefited from this change in the consumers' outlook.

According to the Report on the Survey of Cottage Industries in Bengal[16] (the survey was carried out in 1924), there were at that time two principal weaving schools in the district popularly associated with Farasdanga and Serampore. The former literally meant "the territory of the French" and the allied products came from centres in and around French Chandernagore. Serampore and certain villages in the same subdivision, namely Rajbalhat, Dwarhatta, Haripal, Kaikala, Begampur, Kharsarai, Mundalika etc. were inhabited by a large number of weavers. Of them Rajbalhat was by far the most

important centre where 3 to 4 thousand fly-shuttle looms were at work. The weavers worked on their own as also on the *bāni* system, the rate of wages varying from Rs. 3.50 to Rs. 8 per pair of dhoti or sari according to the count of the yarn used. In the Sadar subdivision, weavers were concentrated at Somaspur, Dhaniakhali, Mahmudpur, Allah, Gopinathpur, Gurap and Banna (all in Dhaniakhali P.S.) and Tantipara within Hooghly town. There were about 500 fly-shuttle looms in this area, the wages of the artisans varying from Rs. 2.50 to Rs. 4 per pair. In Arambagh subdivision, Badanganj and neighbouring villages were important seats of cotton weaving employing about 3,000 looms, mostly fly-shuttle, the wages of the artisans varying from Rs. 3.50 to Rs. 8 per pair of dhotis or saris. The Survey Report estimated that—"A weaver can weave about 8 pairs of cloth in a month. The total annual output of handloom made cotton cloth of the district is estimated to be worth between 30 and 40 lakhs of rupees. Howrah *hat* is the principal distributing mart."

Handloom weaving in cotton has always been by far the most important cottage industry of the district. Its steady progress since the twenties of the present century will be evident from the latest reports obtained from the local Block Development Officers and briefly narrated in the following paragraph.

According to B. D. O., Jangipara, there were about 12,000 persons within the Block area in 1965-66 using approximately 5,500 looms and earning on an average Rs. 100 per weaver per month. The handloom industry of Rajbalhat and Atpur, the foremost centres, deserves much more than a passing mention as the weavers of these places have practised the hereditary craft for generations and have enjoyed a well-earned reputation. Pit looms are in vogue in these areas and the yarn used is generally of high counts. In Chanditala P.S. in the same year, some 6,000 persons were engaged in handloom weaving on 1,482 looms, the average monthly income of each weaver varying between Rs. 60 and Rs. 75. Dhaniakhali is the most widely-known handloom weaving centre of the district and its products, especially saris, enjoy a great renown for their fine texture and durability. The goods turned out at the neighbouring villages of Brindabanpur, Mahmudpur, Purba Kalikapur, Somaspur and Gopinathpur also pass off as Dhaniakhali products. About 3,000 weavers, including 800 women, are employed in the handicraft, the average monthly income for each worker being Rs. 60. In the Khanakul Block area, cotton weaving is an important cottage industry providing employment to about 200 persons. Here, as elsewhere in the district, the weavers usually get yarns from the local *mahājans* who collect the finished products on payment of remunerations varying according to the quality of the goods. In several villages under the Pandua P.S. about 300 persons are engaged in handloom weaving while in the villages of Dentra and Somsara in Polba P.S.

about 65 persons are similarly occupied. Cotton cloths are also manufactured in sizeable quantities in Haripal P.S., Haripal and Dwarhatta being the principal centres. In Goghat P.S. handloom units operate in the villages of Shyambazar, Badanganj, Hazipur, Mandaran and Kamarganj providing part-time or full-time employment to about 3,000 weavers. In 1964-65 there were 15,753 handlooms in the district producing a total quantity of 19 million yards of cloth of various descriptions.

Other cottage and small-scale industries

Other cottage and small-scale industries are not concentrated in any particular area but are scattered all over the district in small units. According to a survey undertaken by the Directorate of Industries, West Bengal during 1960-62, there were 716 *biḍi* making establishments in the district providing employment for 1,888 persons. The manufacture of bricks, tiles and *soorki* engaged 12,988 persons during the same period. Brass, copper and bell-metal crafts were carried on in 110 units employing 317 persons while cutlery manufacturing units numbered 108 and engaged 204 workers. Pottery was another widely practised handicraft which, according to the same survey, provided employment to 3,679 artisans in 1,255 units scattered all over the district. Bamboo and cane products accounted for 1,097 units employing 1,532 persons. Hand-block printing was carried on in 56 units supporting 732 workers. About 1,006 persons in 763 units were employed in blacksmithy while 784 carpentry units engaged 1,620 persons. 1,775 persons in 860 units depended on hand-pounding of rice and 2,575 workers in 1,099 units depended on the confectionery industry for their living. Mention may also be made of the 57 industrial establishments connected with general and jobbing engineering where at least 4,601 persons found work. In all these cottage and small-scale industries, employment was whole-time as well as part-time and seasonal in some cases.

State aid to industries

During the Second Plan period, out of a total number of 1,575 applicants 1,024 received loans worth Rs. 3,68,745 under the State Aid to Industries Act of 1931. Arrangements were also made during this period for procurement of raw materials, provision of power at concessional rates, supply of machines and machine-parts on hire-purchase basis and of imported materials and machinery for the benefit of the industrial units in the district. Controlled materials and marketing assistance were also made available to them. As a result employment in the cottage and small-scale industries sector in the district increased by about 30 per cent. Liberalization of the provisions of the State Aid to Industries Act during the Second Plan period ensured the distribution of loans quickly and in a more efficient manner. Against 290 applications received during the first two years of the Third Plan period, a total amount of Rs. 2,36,900 was distributed in 86 cases while about 200 entrepreneurs of the district were benefited through import of industrial machinery and raw materials.[17]

Marketing facilities were extended to various producing units through the Government sales emporia and the West Bengal Small Industries Corporation. This latter body opened a yarn depot at Dhaniakhali during the Third Plan period for supplying fine yarns of the Kalyani Spinning Mills to *bona fide* weavers at reasonable prices.

State schemes

During the Second Plan period the following schemes, amongst others, were taken up by the Directorate of Industries, West Bengal in the Hooghly district.[18]

The aim of the blacksmithy and carpentry centre at Bhadrakali was to manufacture furniture, fittings, and agricultural implements by imparting training to local persons. The unit produced goods worth Rs. 77,000 during the Second Plan period when 10 students were trained. A programme for training in the manufacture of electrical fittings and engraved wooden blocks for textile printing was launched at this centre during the Third Plan period.

The training-cum-production centre for mechanical toys at Mechuabazar Ghat, Chinsura spent Rs. 3,68,623, trained 28 students and employed 32 persons during the Second Plan period and also sponsored the formation of the Hooghly Cooperative Toy-making Society Ltd. with ex-trainees of the centre. The Society received orders worth about one lakh of rupees. In 1964-65 the centre had an invested capital of Rs. 7,84,922 and the wooden and sheet-metal toys produced by it enjoyed a market all over India.

The hand-made paper centre at Dasghara produces hand-made paper on the lines of the Khadi & Village Industries Commission's scheme and manufactured during the first four years of the Second Plan period standardized paper worth Rs. 2,480 and employed 11 workers.

The model block-printing and pattern-making factory at Serampore is engaged in producing hand-blocks for printing on various textile and silk fabrics. A total of 32,911 yards of printed fabrics were produced by this unit during the period from 1961-62 to 1963-64.

Technical training

During the Second Plan period arrangements were also made for imparting technical training in the district through (*i*) various aided institutions, textile demonstration groups and peripatetic weaving parties under the Directorate of Industries, West Bengal, (*ii*) the College of Textile Technology at Serampore and (*iii*) the Hooghly Institute of Technology under the Education Department, West Bengal.

During the Third Plan period an industrial training institute was set up at Keota, near Bandel, with provision for training in mechanical draughtsmanship, welding, carpentry, smithy etc. The handloom research section of the College of Textile Technology, Serampore was also strengthened through a grant of Rs. 1,50,000. Besides, most of the Development Blocks in the district had their training-cum-production centres during the Third Plan period for imparting training in various trades.

Financial assistance to rural artisans

The following table shows the subdivisionwise break-up of financial assistance given in 1964-65 to various categories of rural artisans totalling 171 in the district.

Name of subdivision	Blocks covered	Allotment received (Rs)	Disbursement (Rs)
Hooghly Sadar	4	19,000	17,500
Arambagh	5	20,000	14,350
Chandernagore	2	7,000	7,000
Serampore	4	15,400	12,600
Total	15	61,400	51,450

Industrial co-operatives

There were 106 industrial co-operative societies in the district in June 1966 of which the weavers' co-operatives formed the largest group. These were located at Dhaniakhali, Goghat, Chinsura, Bhadreswar, Chandernagore, Tarakeswar, Balagarh, Jangipara, Arambagh and Khanakul police stations. On 30 June 1966 the societies had a membership of 6,678 and their total paid-up and working capitals amounted to Rs. 1,23,310 and Rs. 11,54,245 respectively. Their purchases during 1965-66 were worth Rs. 17,96,876 and sales Rs. 19,32,039. In 1966 the largest industrial co-operative in the district was the Rajbalhat Union Co-operative Society Ltd. (a weavers' co-operative) with 943 members.

Assistance by Khadi & Village Industries Board

During the Second and Third Plan periods, especially the latter, the Khadi and Village Industries Board, West Bengal rendered financial assistance to various cottage industries schemes operating in the district, the amounts being shown in rupees in the following statement.[19]

	1963-64		1964-65		1965-66	
Category of schemes	Loan	Grant	Loan	Grant	Loan	Grant
Khadi	26,648	12,196	43,000	43,352	34,000	9,656
Hand-pounding of rice	2,000	—	23,500	4,686	10,000	2,400
Village pottery	—	—	16,000	12,500	—	—
Village oil	7,850	800	—	1,300	—	300
Cane-*gur*	—	—	—	—	—	—
Hand-made paper	—	—	25,000	17,500	1,00,000	—
Fibre	11,720	11,160	10,025	9,860	13,000	15,520
Village leather	—	—	3,250	3,970	—	—

Assistance by Cottage & Small Scale Industries Department

The assistance, by way of loans, given in recent years to various rural industries in the district by the Cottage and Small Scale Industries Department of the Government of West Bengal is shown in the following statement.

Year	Nature of industry	Amount of loan sanctioned (Rs.)
1961-62	Carpentry	5,000
"	Brick-making	12,000
1962-63	Paddy-husking	6,000
"	Powerloom	12,000
1964-65	Paddy-husking	14,000
"	Panel pin manufacture	15,000
"	Brick-making	40,000
"	Manufacture of rivets & staple pins	25,000
1965-66	*Soorki* mill	15,000
"	Manufacture of industrial alchorectified spirit etc.	75,000

Assistance under State Aid to Industries Act

Loans under the Bengal State Aid to Industries Act may be sanctioned in suitable cases by the State Government, the Director and Additional Director of Industries, West Bengal, registered co-operative societies, District Magistrates and Block Development Officers up to the respective ceilings fixed for each of them. The following table[20] shows the loans so granted to industrial units in Hooghly district during the Second and Third Plan periods.

Loans sanctioned by	Second Plan		Third Plan	
	No. of industrial units	Amount (Rs.)	No. of industrial units	Amount (Rs.)
State Govt., Director & Addl. Director of Industries	18	75,900	9	1,73,500
Registered co-operative societies	2	24,750	1	10,000
Block Development Officers	401	95,900	588	1,62,500 (up to 1964-65)
District Magistrate	—	1,37,575	—	4,66,250
Total	421*	3,34,125	598*	8,11,250

*Excluding units assisted by the District Magistrate.

Industrial arts

The only artistic craft of the district which once enjoyed an overseas market is fine *chikan* embroidery described earlier in this chapter. There is a proposal to form a co-operative society with the artisans engaged in the industry at Babnan (Dadpur P.S.), the main centre of the handiwork. Some of the brass and bell-metal products of Bansberia are of artistic quality. Bamboo and cane products, of which mention has been made already, also present, in some cases, good specimens of industrial art.

Industrial potential and plans for future development

One striking feature of the industrial development of the district is the palpable imbalance in regional growth, that is between the narrow riparian strip along the Bhagirathi from Uttarpara to Tribeni and the rest of the district. While the former bristles with modern factories, industrial progress elsewhere is indicated, at best, by cold storages and rice mills occurring sparsely in Singur, Jangipara, Tarakeswar, Dhaniakhali, Arambagh, Balagarh and Pandua police stations while the remaining parts of the district still exhibit a strong agricultural bias with no sign of immediate industrial development. In order to rectify this imbalance, it is necessary to "diversify the predominantly agricultural rural economies through a suitable development of secondary and tertiary industries. Such a process will incidentally help to mop up the so-called agricultural surplus in the rural areas."[21]

It has already been stated that large-scale industries in the district have grown and are growing now according to policies formulated by the Union and not the State Government. As regards small-scale industries, their expansion is linked with the gradual extension of electricity to the interior villages. More rice mills, cold storages, bricks and tiles manufacturing units, small factories for production of agricultural implements and the like are expected to grow in number with better distribution of energy. For instance, agro-based industries like food preservation and manufacture of cane-sugar are a possibility in the Jangipara Block area as and when the rural electrification programme comes to cover it. Elsewhere, the setting up of power-driven saw mills may lead to the growth of packing wood industry and mechanized carpentry. In the Jangipara Block there is a State Palm *Gur* Training Institute established at Rashidpur towards the close of the Third Plan with the assistance of the Khadi and Village Industries Board which is likely to help utilize resources hitherto untapped. In the Khanakul Block area good prospects exist for expansion of the weaving industry by introducing powerlooms. In the potato-growing areas of Tarakeswar, Singur and Haripal police stations there is scope for further construction of cold storages. There were only 114 powerlooms in the district on 31 March 1964 under the co-operative fold providing an opportunity for increasing their number with more widespread distribution of electricity.

The prospects of handloom weaving, by far the most important cottage industry of the district, deserve special mention. Through a policy of reservation of the sector of production and liberal assistance under the Plan schemes the industry took a big stride forward in the post-independence era. The broad features of the development plan comprises supply of finance in the form of working capital and share capital loans to weavers' co-operatives, marketing assistance to such units through subsidy on sales and promotion of exports, provision of raw materials, improvement of production techniques through supply of improved appliances and evolution of better designs through design development schemes etc. During the First, Second and Third Plan periods the amount of grants and loans disbursed to the handloom co-operatives in the district were of the order of 0.17 and 0.80, 4.43 and 3.61 and 2.41 and 3.75 lakhs of rupees respectively. As a result, the number of handlooms, which was 10,580 at the end of the Second Plan rose to 15,753 by the close of the Third Plan.

The statement below shows the number of registered handlooms in the district, the employment created by them and their total volume of production during the successive Plan periods.

	First Plan	Second Plan	Third Plan (up to 1964-65)
No. of registered looms at the end of	11,464	10,580	15,753
No. of persons employed at the end of	28,662	26,450	39,382
Production at the end of	—	—	190.2 lakh yards

LABOUR AND EMPLOYERS' ORGANIZATIONS

It has already been stated that most of the large-scale industries of the district have their registered offices at Calcutta which are affiliated to the different Chambers of Commerce. As such, there is no separate employers' organization in the district. Labour organizations, however, numbered 55 in 1965 of which mention may be made of the Dunlop Rubber Factory Labour Union with a membership of 4,468 persons, the Bansberia Jute Mills Labour Union with 4,247 members and the Hindusthan Motor Workers' Union with a strength of 2,545 workers. From the list of registered trade unions[82] it appears that the Bengal Distilleries Employees' Union, Konnagar, registered on 23 June 1947, is the oldest of its kind in the district and had a membership of 383 on 31 March 1965. The next oldest union is the India Belting Labour Union, Serampore, registered on 2 January 1948 and having 74 members at the end of 1964-65. The labour organizations in the district are mostly affiliated either with the Indian National Trade Union Congress or the Indian Trade Union Congress.

While dealing with large-scale industries of the district, it has been stated earlier that in many cases differences between the employers and labour are jointly discussed and settled by the management and the employees. Where such disputes cannot be mutually negotiated, they are referred to appropriate officers under the Labour Commissioner, West Bengal

During the past few years labour unrest in the district mainly originated from demands for better wages, bonus and amenities, retrenchment of workers and disciplinary action taken against employees. Cases of labour unrest numbered 12 in 1962, 22 in 1963, 22 in 1964 and 29 in 1965.

A complete list (furnished by the Commissioner of Labour & Registrar of Trade Unions, West Bengal) of the labour organizations, functioning in the district on 31 March 1965, with their respective memberships and dates of registrations, is appended to this chapter.

Welfare of industrial labour

In August 1966 two ordinary labour welfare centres and one model labour welfare centre were functioning at Telenipara, Rishra and Serampore respectively. They provided medical, educational, cultural and recreational facilities to workers besides holding classes for workers' children and supplying to them, free of cost, primary books, pencils, slates etc. There are also several audio-visual centres equipped with radio sets, facilities for sports and games, libraries and reading rooms. In 1964 the Telenipara labour welfare centre participated in the labour forum of the All India Radio. Recently the labour welfare centre at Serampore has been provided with a dispensary and training in certain crafts has also been introduced there for the benefit of workers.

Minimum Wages Act

A post of Inspector of Minimum Wages, attached to the office of the Assistant Labour Commissioner, Chandernagore, was created in 1959 to facilitate inspection of industrial units under the provisions of the Minimum Wages Act of 1948. The jurisdiction of the post extends over the districts of Hooghly and Burdwan except Asansol subdivision. The main duty of this officer is to watch the working of the provisions of the Act and start claim cases or prosecutions, as the case may be, for violation of the same.

APPENDIX

LIST OF TRADE UNIONS IN THE DISTRICT OF HOOGHLY AS ON 31 MARCH 1965*

Sl. No.	Name of the Union, its location and affiliation	Membership	Date of registration
1.	Dunlop Rubber Factory Labour Union; Sahaganj, Hooghly. (INTUC)	4,468	25.3.46
2.	Bansberia Jute Mills Labour Union; Bansberia, Hooghly. (National Union of Jute Workers' Federation)	4,247	26.4.46
3.	Hind Motor Employees' Union; Uttarpara, Hooghly. (INTUC)	3,017	14.10.50
4.	Hindustan Motor Workers' Union; Bhadrakali, Hooghly. (AITUC)	2,545	20.1.58
5	Hooghly Zilla Chasi Mazdoor Congress; Bansberia, Hooghly. (INTUC)	1,325	14.10.54
6.	Serampore Subdivisional Cotton Textile Workers' Union; Rishra, Hooghly. (INTUC)	1,275	20.11.57
7.	Hooghly District Cotton & Textile Workers' Union. (HMS)	1,150	27.6.60
8.	Jayshree Textiles Mazdoor Union; Rishra, Hooghly. (AITUC)	980	1.9.54
9.	Luxminarayan Cotton Mills No. 2 Workers' Union; Rishra, Hooghly. (AITUC)	650	25.5.53
10.	Bangasree Cotton Mills Workers' Union; Rishra, Hooghly. (No affiliation)	609	23.7.53
11.	Alkali Chemical Mazdoor Union; Rishra, Hooghly. (INTUC)	600	12.6.56
12.	J. K. Steel Mazdoor Union; Rishra, Hooghly. (AITUC)	550	20.12.57
13.	Glass Employees' Union; Rishra, Hooghly. (No affiliation)	480	17 10.53
14.	Bengal Distilleries Employees' Union; Konnagar, Hooghly. (AITUC)	383	23.6.47
15.	Rampuria Cotton Mills Employees' Union; Serampore, Hooghly. (INTUC)	339	10.1.64
16.	Luxminarayan Jute Mill Cotton Section Workers' Union; Konnagar, Hooghly. (AITUC)	283	13.1.58
17.	D. Waldie Labour & Staff Union; Konnagar, Hooghly. (No affiliation)	264	3.4.64
18.	Shem Engineering Products Mazdoor Union; Rishra, Hooghly. (BPTUC)	250	28.10.60
19.	Hindusthan Construction Employees' Union; Bhadreswar, Hooghly. (INTUC)	226	5.5.64

**Source*: Commissioner of Labour & Registrar of Trade Unions, West Bengal.

Sl. No.	Name of the Union, its location and affiliation	Membership	Date of registration
20.	National Union of District Board Employees of West Bengal; Chinsura, Hooghly. (BPNTUC)	184	11.9.61
21.	Bangeswari Mazdoor Union; Rishra, Hooghly. (No affiliation)	180	8.3.54
22.	Window Glass Employees' Union; Bansberia, Hooghly. (INTUC)	171	20.3.64
23.	Magra Union Board Rice Mill Mazdoor Union; Bansberia, Hooghly. (INTUC)	151	19.2.58
24.	Bansberia Mill Employees' Union; Bansberia, Hooghly. (No affiliation)	149	9.5.46
25.	Braithwaite Employees' Union; Bhadreswar, Hooghly. (INTUC)	149	12.2.65
26.	Chandernagore Municipal Corporation Employees' Union; Chandernagore, Hooghly. (No affiliation)	143	3.2.59
27.	Bansberia Municipal Employees' Association; Bansberia, Hooghly. (INTUC)	134	19.5.54
28.	Hooghly-Chinsura Municipal Employees' Association; Hooghly. (No affiliation)	131	19.5.49
29.	Keymer Regshava Mfg. Sramik Union; Rishra, Hooghly. (AITUC)	130	20.6.57
30.	Kesoram Rayon Factory Mazdoor Union; Bansberia, Hooghly. (BPNTUC)	128	23.11.60
31.	Madura Mills Employees' Union; Serampore, Hooghly. (INTUC)	120	1.10.63
32.	Hooghly District Chaulkal Sramik Union; Pandua, Hooghly. (BPTUC)	116	13.1.60
33.	Champdani G.I.S. Cotton Mill Employees' Union; Bhadreswar, Hooghly. (INTUC)	98	19.2.64
34.	Eastern Belting Mazdoor Union; Hooghly. (INTUC)	96	24.7.50
35.	India Tea Employees' Union; Konnagar, Hooghly. (No affiliation)	82	25.4.62
36.	Spun Pipes & Foundries Workers' Union; Bansberia, Hooghly. (INTUC)	81	12.3.58
37.	Hooghly District Motor Drivers' & Cleaners' Association; Magra, Hooghly. (No affiliation)	80	27.2.64
38.	Magra Thana Rickshaw Union; Tribeni, Hooghly. (No affiliation)	78	19.2.58
39.	Serampore Belting Workers' Union; Rishra, Hooghly (INTUC)	78	5.9.55
40.	India Belting Labour Union; Serampore, Hooghly. (INTUC)	74	2.1.48
41.	Gondalpara Foundry Workmen's Union; Telenipara, Hooghly. (BPNTUC)	72	3.8.62

Sl. No.	Name of the Union, its location and affiliation	Membership	Date of registration
42.	Birkmyre Brothers Employees' Union; Konnagar, Hooghly. (INTUC)	72	22.3.47
43.	Eastend Paper Industries Employees' Union; Bansberia, Hooghly. (INTUC)	69	17.1.64
44.	Hooghly Zilla Khet Mazdoor Samity; Serampore, Hooghly. (No affiliation)	66	12.4.61
45.	Seraikella Glass Workers' Union; Konnagar, Hooghly. (INTUC)	60	16.3.64
46.	Champdani Municipal Employees' Association; Baidyabati, Hooghly. (No affiliation)	57	18.8.50
47.	H. G. Refinery Co. Workers' Union; Konnagar, Hooghly. (No affiliation)	51	5.3.59
48.	Tanti Sramik Union; Guptipara, Hooghly. (No affiliation)	50	7.3.63
49.	Rampuria Clerks' Union; Serampore, Hooghly. (BPNTUC)	50	14.12.60
50.	Textile Technical Employees' Association; Serampore, Hooghly. (AITUC)	49	19.2.57
51.	Indian Tack Mail Employees' Union; Konnagar, Hooghly. (No affiliation)	47	19.9.64
52.	Chandernagore Electric Employees' & Workers' Union; Chandernagore, Hooghly. (CPI)	46	14.2.55
53.	Serampore Bayan Silpa Karmi Sangha; Serampore, Hooghly. (No affiliation)	39	20.7.60
54.	East End Paper Labour Union; Tribeni, Hooghly. (INTUC)	24	9.3.65
55.	Ananta Dyeing & Printing Workers' Union; Serampore, Hooghly (BPTUC)	22	17.6.61
56	Belting Workers' Federation: Rishra, Hooghly. (INTUC)	—	20.9.56

NOTES

1 L. S. S. O'Malley—Bengal District Gazetteers: Hooghly. Calcutta, 1912. pp. 184-85.

2 Report on the Survey of Cotton Industries in Bengal (Second Edition). Calcutta, 1929. p. 26.

3 L.S.S.O'Malley—op. cit. p. 180.

4 George Toynbee—Administration of Hooghly District. Calcutta, 1888. p. 98.

5 Techno-Economic Survey of West Bengal: Published by National Council of Applied Economic Research. New Delhi, 1962. p. 149.

6 Source: Statistical Abstract, West Bengal, 1961. p. 237 & 239.

7 Source: ibid. pp. 235-40.

8 Source: The State Electricity Board, West Bengal.

9 L.S.S.O'Malley—op. cit. p. 181.

10 Loc. cit.

11 Source: Deputy Chief Inspector of Factories, West Bengal.

12 Source: District Industrial Officer, Hooghly.

13 Source: Chief Inspector of Factories, West Bengal.

14 Source: District Industrial Officer, Hooghly.

15 L.S.S.O'Malley—op. cit p. 182.

16 Report on the Survey of Cottage Industries in Bengal (2nd Ed.) published by the Department of Industries, Government of West Bengal. Calcutta, 1929. p. 26.

17 Source: District Industrial Officer, Hooghly.

18 Source: Directorate of Industries, West Bengal.

19 Source: Executive Officer, Khadi & Village Industries Board, West Bengal.

20 Source: Secretary, Board of Industries, West Bengal.

21 Techno-Economic Survey of West Bengal. p. 29.

22 Source: Commissioner of Labour & Registrar of Trade Unions, West Bengal.

CHAPTER VI

BANKING TRADE AND COMMERCE

Banking and Finance

History of indigenous banking in the district

The earliest reference to the existence of a system of banking in this region, as traceable in Kavikankan Mukundaram's *Chandimangal*, a work of *circa* A.D. 1600, relates to the activities of a "class of shroffs usually called poddars, who exchanged cowries (shells) and silver coins, the usual currency of a Bengal market."[1] "They acted as bankers and money-changers, and remitted money for others from one town to another and issued letters of exchange."[2] They had cornered the bulk of the specie of the land and operated a network of houses in almost every part of the country.[3] The Bengal District Records of the 18th century show that revenue was not paid by the zemindars to the officers of the East India Company direct, but was collected through the agency of these shroffs. As losses due to misappropriation by the middlemen in various ways were inherent in the system, it was abolished in 1778. H. Verelst, the Governor of Bengal (1767) "records that the East India Company had to take the help of this class of men for guarding against the withdrawal of coins from circulation. ...This practice of the shroffs was, as stated by Verelst, introduced by Jagat Seth at the time of Nawab Jafar Khan, but the custom may have been much older."[4]

The banking house of Jagat Seth played "a part in the economic life of Bengal which was so paramount that Burke could compare it with that of the Bank of England."[5] Hooghly was one of its centres of activities.[6] "At the beginning of Ali Vardi's reign the Setts possessed a capital of ten crores of rupees. Soon they established a virtual monopoly in banking over the whole province and all the bankers in Bengal were their factors, if not members of their house. With huge cash in their counters they were not only the bankers and treasurers of the Nawab but also of the revenue-farmers and zamindars."[7] The Dutch, the French and the English depended very much on the Seths for commercial credit. Even in the year of Plassey, the Dutch borrowed 4 lakhs of rupees at 9 per cent and the French debt before the capture of Chandernagore was a million and a half.[8] "Inland traders must have also thronged their Kuthis for the supply of credit for their terms were lenient."[9] The battle of Plassey marked the end of their prosperity and the decline of the house was very rapid after the brutal murder of its leading members at the instance of Mir Qasim. After the grant of the Diwani, this institution ceased to be the channel of revenue payment and when the treasury was

transferred to Calcutta the Jagat Seths practically ceased to act as bankers to the Company. Their sources of wealth dried up and their trade in rupees passed into the hands of the smaller shroffs in league with each other.

With the rise of the 'agency houses' and of joint-stock banking at the beginning of the 19th century, the indigenous bankers suffered a serious set-back. But, as noticed by the Banking Enquiry Committee[10] in 1929-30, they played and still play an important role in the financing of industries, of internal trade to a larger and agriculture to a lesser extent. They usually combine banking with some form of trade, wholesale or retail.[11]

Rural indebtedness

It has been aptly said about the Bengali cultivator that he "is born in debt, increases his debt throughout his life and dies more hopelessly in debt than ever."[12] According to the Bengal Provincial Banking Enquiry Committee, the agriculturists of Hooghly district obtain their finance from (*i*) professional money-lenders, (*ii*) non-cultivating proprietors of holdings (advancing money to their *bargādārs*), (*iii*) traders (advancing money on crops to be harvested), (*iv*) co-operative credit societies, (*v*) landlords, (*vi*) *ṭāccāvi* loans under the Agriculturists' Loans Act.[13] An idea of the extent of rural indebtedness then prevailing in the district may be had from the fact that in the Guptipara Union alone, with a population of 10,000, total debts of agriculturists amounted to about Rs. 1,00,000 of which co-operative societies had lent 75 per cent, local *mahājans* 20 per cent, and *kābulis* 5 per cent.[14] The percentages of unsecured and secured loans in the district were usually about 75 and 25 respectively while corresponding figures for the Arambagh subdivision alone were 50 and 50. Professional money-lenders in the district normally charged Rs. 1.56 to Rs. 2 per cent per month up to Rs. 100 and Re. 1 to Rs. 2 per month for sums above Rs. 100, if the loans were secured by gold, silver or land. The rate of *hātchiṭhas* and handnotes was Rs. 1.56 or more per month. Other unprotected advances bore an interest at Rs. 2 to Rs. 3.12 per month in case of persons having no ready means of repayment. Persons having no real property of their own had to pay higher rates. *Kābuli* money-lenders realized 12 paise per rupee per month. Paddy loans carried an interest of 10 seers per maund if paid after the first winter harvest and of 22½ seers if paid after the second winter harvest. The interest was added to the principal after each year. In the estimate of the Secretary, Hooghly Central Co-operative Bank, Chinsura,[15] the rates of interest varied between 12 and 37.50 per cent per annum on credit advanced by the local money-lenders. Very often compound interest at 12 per cent per annum with yearly or half-yearly rates was charged. The security generally offered comprised landed property and sometimes standing crops in cases of advances on jute. The usual rates of interest, charged by the co-operative societies varied from 12 to 18 per cent of simple

interest per annum. In the opinion of the witnesses before the Banking Enquiry Committee, agricultural indebtedness was on the increase.[16] This is also borne out by the spectacular rise since then in the average debt of members to the rural co-operative societies from Rs. 51 in 1928-29 to Rs. 121 in 1964-65 and in the total membership from 6,001 to 39,601 during the same period.[17]

The following statement compiled from two survey monographs on the villages of Kodalia (Chinsura P.S.) and Ghatampur (Polba P S.)[18] would give a fair idea of the state of rural indebtedness in the district during 1961-62.

NUMBER OF HOUSEHOLDS IN DEBT BY RANGES AND CATEGORIES

Range of indebtedness (in Rs.)	Village	Vocational Categories					
		Cultivation	Agri-Labour	Livestock	Transport, Storage & Communication	Retail trade	Other Services
1-50	Kodalia	—	6	—	5	2	1
	Ghatampur	5	35	—	—	—	—
51-100	Kodalia	—	4	–	3	6	2
	Ghatampur	3	20	—	—	—	—
101-200	Kodalia	1	13	2	4	—	1
	Ghatampur	11	12	1	—	—	—
201-500	Kodalia	1	9	—	5	4	3
	Ghatampur	14	4	—	—	1	—
501 & above	Kodalia	—	—	3	—	2	6
	Ghatampur	2	—	—	—	–	—
Percentage	Kodalia	50	84 2	50	48.6	51 9	33
	Ghatampur	71.4	92.2	33.3	—	—	—

Transactions in cash or kind between private credit agencies (excluding commercial banks) and agriculturists are now regulated by the Bengal Money-lenders Act of 1940, which requires every money-lender to obtain a licence valid for 3 years from appropriate authorities, maintain a cash book, ledger and a receipt book and observe other relevant formalities. Under the Act, the borrower is not liable to pay any amount in respect of the principal and interest of a loan which, together with any amount already paid, exceeds twice the principal of the original loan. He is also not bound to pay simple interest exceeding 10 per cent on unsecured loans and 8 per cent on secured ones. There were 55 licensed money-lenders in the district in 1965 but the number decreased to 43 in November 1966.

Urban indebtedness

No authoritative information about urban indebtedness is available. But a report on the extent of indebtedness in 1929-30 among the jute mill workers in Hooghly submitted by the Secretary, Indian Jute

Mills Association to the Bengal Provincial Banking Enquiry Committee (which published its report in 1930) merits attention. About 20 to 30 per cent of the employees of the Shyamnagar North Mill were in debts to the extent of Rs. 5 to Rs. 50 per head, the usual rate of interest charged being 37½ per cent per annum with security and 75 to 100 per cent per annum without. Regarding repayment, no specific period was usually fixed by smaller private lenders. Loans granted against ornaments etc. were usually repaid as soon as possible. Among the employees of the Victoria Mill, 25 to 30 per cent were in debts, the extent varying on an average from Rs. 10 in the case of an ordinary worker to Rs. 20 in the case of a mill weaver. The rate of interest with security was 37½ per cent for loans up to Rs. 25; 75 per cent for Rs. 25 to Rs. 100 and 60 per cent for Rs. 100 and above while unsecured loans were covered by a 150 per cent interest. Where articles were pledged no compound interest was charged. With pronotes, interest was paid weekly but on failure to pay, compound interest was charged at the rate entered in the bond. In the Presidency Jute Mill the same percentage of employees were indebted. The loans taken by labourers ranged from Rs. 3 to Rs. 5 per week, and for mechanics, even up to Rs. 100 at a time. As regards interest, four general rates, namely 150%, 108%, 72% and 48% per annum were charged. In most cases, repayment was made on the weekly pay days. In Dalhousie Jute Mills, Champdani, the percentage of indebted employees was 20 and the per capita burden of indebtedness averaged Rs. 150. Here loans were usually granted under written contracts, the normal rate of interest being Rs. 4 per cent per month, simple interest. As many as 80 per cent of the employees of the Northbrook Jute Mill, Champdani, were in debts. The amount contracted, usually against written agreement, was Rs. 25 on an average and interest payable was usually 6 paise per rupee per week, simple interest. In the Angus Jute Works 90% of the employees were in debts and many of them obtained their loans from Kabuli money-lenders against hand-notes and mortgages. The interest charged went up to 325 per cent per annum with security and 650 per cent per annum without. But cases of such high rate were reported to be few. Other lenders usually charged between 75 and 150 per cent per annum. Interest was realized on weekly or monthly basis.

Joint-stock banks

Although there are several branches of well-known joint-stock banks in various towns of the district, the part played by them in the financing of big industries is insignificant as all the leading industrial concerns have direct financial arrangements with banking houses in Calcutta. Yet they play an important role in harnessing the savings of the people. The State Bank of India has branches at Chinsura, Chandernagore, Serampore, Arambagh and Tribeni and pay offices at Konnagar and Tarakeswar (all operating under the control of Serampore branch) which were opened on 11 December 1952, 10

September 1956, 28 June 1957, 22 December 1959, 14 June 1965, 5 December 1960 and 11 November 1963 respectively. The average deposits with this bank in 1965 amounted to Rs. 233.81 lakhs, while loans and advances made by it during the same year averaged Rs. 30.78 lakhs.[19] The United Bank of India Ltd., established by way of amalgamation of Hooghly Bank Ltd. with it on 18 December 1950, and having branches at Uttarpara, Serampore, Sheoraphuli, Bhadreswar, Chandernagore and Chinsura had total deposits of Rs. 434.53 lakhs as against loans and advances of Rs. 3.47 lakhs in 1965.[20] The United Commercial Bank Ltd. has a branch at Uttarpara functioning since 1957. Its total deposits amounted to Rs. 49.36 lakhs on 31 December 1965 and loans and advances to Rs. 86,000 in 1965.[21] The United Industrial Bank Ltd. opened a branch at Chandernagore on 6 May 1964 and had deposits of Rs. 9.37 lakhs on 31 December 1965 while loans and advances made by it during 1965 amounted to Rs. 18,000.[22] There is also a branch of the Hindusthan Mercantile Bank at Chandernagore.

Co-operative banks

Rural credit is being increasingly provided by the co-operative banks. The district had two central co-operative banks, namely the Hooghly District Central Co-operative Bank Ltd. and the Arambagh Central Co-operative Bank Ltd., established on 17 February 1919 and 29 June 1929 respectively. They were amalgamated on 29 April 1966 to form the Hooghly District Central Co-operative Bank Ltd. A fair idea of the condition of the banks (jointly) in the years 1950-51, 1955-56, 1960-61 and 1965-66 may be had from the following table.[23]

	1950-51	1955-56	1960-61	1965-66
No. of members	429	553	553	765
Share capital (paid-up) (Rs.)	86,805	1,80,120	2,60,234	5,99,456
Reserve fund (Rs.)	37,885	14,601	15,517	17,319
Deposits (Rs.)	3,43,360	3,79,298	4,98,649	13,64,201
Working capital (Rs.)	5,96,626	10,24,997	20,43,813	61,54,917
Loans outstanding (Rs.)	2,48,171	4,47,508	7,48,975	32,93,609
Loans issued (Rs.)	93,310	6,51,535	9,03,000	20,09,000
Profit (+) or Loss (—) (Rs.)	+2,053	+1,153	—2,43,666	—1,90,858

The Hooghly District Co-operative Land Mortgage Bank Ltd., established in 1957, supplies long-term credit to agriculturists. Its position during 1965-66 was as follows: total membership 746, paid-up capital Rs. 65,425, statutory reserve Rs. 6,297, working capital Rs. 10.80 lakhs and loans outstanding Rs. 9.25 lakhs.[24] According to the Registrar of Co-operative Societies, West Bengal,

there were, in 1967-68, 664 Primary Agricultural Co-operative Societies in the district with a total membership of 33,324, an aggregate working capital of Rs. 75.09 lakhs, overall deposits of Rs. 1.18 lakhs, a loan amount of Rs. 52.75 lakhs and outstanding loans of Rs. 68.15 lakhs. During the same year 345 of these societies made of a total profit of Rs. 64 lakhs, 255 incurred an overall loss of Rs. 26 lakhs and 64 registered no profit or loss.

State assistance to agriculture

The State Government also provides finance to the cultivators under different Acts and schemes, e.g. Agriculturists' Loans Act, 1884, The Land Improvement Loans Act, 1883, artisan loan, fertilizer purchase loan etc. Of the total expenditure under the different loan-heads from 1955-56 to 1965-66, a large proportion came under the Agriculturists' Loans Act and the fertilizer purchase loan, as indicated in the following table (figures are in lakhs of rupees).[25]

AGRICULTURISTS' LOANS ACT

Year	Agricultural Loan	Cattle Purchase Loan	Fertilizer Purchase Loan
1955-56	6.90	2.50	—
1956-57	12.11	3.50	—
1957-58	7.13	2.02	—
1958-59	7.40	3.10	8.34
1959-60	8.69	2.37	7.48
1960-61	8.43	3.36	6.08
1961-62	2.14	2.34	5.90
1962-63	2.95	2.38	5.77
1963-64	2.63	2.98	7.24
1964-65	1.16	2.43	9.10
1965-66	1.21	3.10	10.45

The Government also distributed a total sum of Rs. 4,65,620 by way of loans to artisans from 1955-56 to 1961-62; Rs. 16,400 under the Land Improvement Loans Act, 1883 during 1956-57, 1957-58, 1959-60, 1960-61, 1962-63 and 1963-64; Rs. 50,000 as house-building loan (flood) in 1956-57 and Rs. 2,40,000 as house-building loan (interest-free) in 1957-58.

Life Insurance, National Savings & Postal Savings Banks

The Life Insurance Corporation of India has four units in the district. During 1965-66 these units did a total business of Rs. 377.22 lakhs for 10,351 policies as against Rs. 270.61 lakhs for 7,566 policies in 1961.[26] In the field of National Savings, deposits during 1965-66 amounted to Rs. 37.70 lakhs against Rs. 49.28 lakhs in 1961-62. The

Post Office Savings Banks in the district had a total deposit of Rs. 36.35 lakhs in 1965-66 as against Rs. 33.47 lakhs in 1961-62.[27]

State assistance to industrial development

Under the Bengal State Aid to Industries Act, the State Government rendered financial assistance to industries to the extent of Rs. 30,675 during 1960-61 and Rs. 76,650 in 1965-66.[28] Assistance also came to the industries from various corporations created for the purpose under State or Union Acts. The West Bengal Financial Corporation sanctioned Rs. 38 lakhs to 11 units during 1956-61 and Rs. 83.41 lakhs to 31 units during 1962-66, while the total amounts disbursed during the same period were Rs. 26.52 lakhs and Rs. 59.17 lakhs respectively.[29] The West Bengal Small Industries Corporation Ltd. supplied 73,278 lbs. of yarn, worth Rs. 5,63,612, to 200 units and 65.6 tonnes of raw materials valued at Rs. 2,16,930 to 15 units in 1962-63 while in 1965-66 it supplied 2,412.5 kg. of yarn worth Rs. 45,507 to 40 units and 53.050 tonnes of raw materials, valued at Rs. 2,75,520, to 14 units.[30] But the contribution of the Industrial Finance Corporation of India towards industrial development in the district deserves special mention. The following table would indicate the extent of assistance rendered by it through advances of loans during the first three Plan periods.[31]

ASSISTANCE BY INDUSTRIAL FINANCE CORPORATION

(Figures are in lakhs of Rupees)

Name of Company	First Five Year Plan	Second Five Year Plan	Third Five Year Plan
Hindusthan National Glass Manufacturing Co. Ltd., Rishra	18	43	10.05
Window Glass Ltd., Bansberia	—	25	15
East End Paper Industries Ltd., Bansberia	—	20	10
Shalimar Wires & Industries Ltd., Uttarpara	—	—	30 (including 5 lakhs for underwriting)
Sen Equipments Ltd., Serampore	5	—	—
Standard Pharmaceutical Works Ltd., Serampore	6.75	—	—
Bengal Fine Spinning & Weaving Mills Ltd., Konnagar	10.00	—	—
Sree Engineering Products Ltd., Rishra	—	—	13
Total	39.75	88	78.05

The extent of assistance rendered by the West Bengal Khadi & Village Industries Board by way of loans and grants to *khadi* and paddy-husking industries during the Second and Third Five Year Plans is given in the table below.[32]

	Loans (Rs.)		Grants (Rs.)	
	Second Plan	Third Plan	Second Plan	Third Plan
Khadi	7,143	1,50,986	23,960	93,326
Paddy-husking	12,000	64,000	2,359	8,826

The Board also disbursed loans and grants to various other industries during the Third Five Year Plan, the extent of which is indicated in the following table.

Name of industry	Loans disbursed (Rs.)	Grants made (Rs.)
Cane *gur*	1,750	—
Village-oil	14,325	6,249
Village pottery	37,000	5,000
Village leather	6,500	7,940
Fibre	34,745	36,640
Palm *gur*	1,679	1,981
Hand-made paper industry	40,750	21,250

TRADE AND COMMERCE

The earliest known trade centre in the district was Tribeni, a flourishing pilgrim centre on the Bhagirathi since the days of Hindu rule. It was the headquarters of the south-west province of Bengal under the early Muslim rulers. Following the transfer of the seat of Government to Satgaon the latter place "became an important entrepot from which goods, both local and imported, were distributed over the country, partly by pack-bullocks but chiefly by boats. After the middle of the 15th century, the Portuguese began to trade with Bengal and were attracted by Satgaon, or as they called it Porto Piqueno, or the little port on the Ganges. This is clear from the remarks of the Portuguese chronicler De Barros (*circa* A.D. 1560) who, speaking of the Ganges, wrote: "Its first mouth, which is on the west, is called Satigan, from a city of that name situated on its streams, where our people carry on their mercantile transactions." During the 16th century the trade of Satgaon was at its zenith. The Bengali poem *Chandi* of Kavikankan (*circa* 1600) bears testimony to its

prosperity, and Cesare Federici, who visited the place about A.D. 1580, remarked: "In the port of Satagan every yeere I de thirtie or thirtie-five ships great and small, with rice, cloth of bombast of diverse sortes, lacca, great abundance of sugar, mirabolans dried and preserved, long pepper, oyle of zerzeline, and many other sorts of merchandise. The citie of Satagan is a reasonable fair citie for a citie of the Moores, abounding with all thiugs."

O'Malley, in his old District-Gazetteer of Hooghly wrote: "Before the Mughal conquest of Bengal in 1575 A.D., the Portuguese had been allowed to settle at Hooghly, 4 miles south of Satgaon, where they erected extensive godowns; and as the shipping was mostly in their hands, they succeeded in transferring the sea-borne trade to this town.... The *Ain-i-Akbari* (completed in 1596-7 A.D.) notices that the *sair* duties from *bandar-ban* (port dues) and *mandavi* (market dues) in *Sarkar* Satgaon amounted to 1,200,000 dams or Rs. 30,000, and states that Hooghly had become the chief port, though Europeans still carried on an import and export trade with Satgaon.

"During the first thirty years of the 17th century Satgaon declined; and even the inland trade was mostly diverted to Hooghly,"[88] which thereafter became the principal port of the Portuguese.

"In 1632 Hooghly was besieged and captured by the army of the Bengal Nawab, and though the Portuguese were soon after allowed to return, their power was irretrievably lost. Hooghly now became the seat of the local *faujdar* and the Imperial custom-house was located there. The Dutch, the English and, later on, the French, also settled in the place, so that in spite of the decline of the Portuguese power trade flourished. W. Clavell, the English Chief, in his account of the trade of Hooghly (1676), noticed that the Dutch exported rice, oil, butter, hemp, cordage, sail cloth, raw silk, silk fabrics, saltpetre, opium, turmeric, 'neelaces' (indigo-dyed cloths), ginghams, sugar, long pepper, bees-wax, etc. Besides cotton and tusser cloths, which were woven by weavers in the neighbourhood, silk, sugar, rice, wheat, oil, butter, coarse hemp and gunnies were brought in from the adjoining country. Saltpetre was also brought from Bihar and apparently refined at Hooghly. The articles required by the Company were obtained either by contract with the local merchants or by sending out 'banians' (brokers) with passes authorising them to convey their purchases free of custom....

"In the first half of the 18th century the trade of the district continued to expand. The Dutch at Chinsura, the French at Chandernagore, the Danes a little below it at Dinemardanga, the Ostend Company at Bankibazar opposite to it, had considerable settlements, and though the English Company had removed their headquarters to Calcutta, they had agents in Hooghly, where a great part of their purchases were made. The Imperial custom-house, moreover, was at Hooghly, so that both sea-borne and the internal

trade had to pass through it to pay customs duty or to get free passes. The amount thus levied may be realised from the fact that in 1728 *Sair Bakshbandar*, i.e., export and import dues on foreign merchandise, yielded Rs. 2,21,975 at the rate of 2½ per cent, on the value of the goods, and, with the tolls on 9 *ganjes* or subordinate stations, realised Rs. 2,42,014 *sicca* rupees. . . .

"Trade suffered greatly during the wars waged between 1740 and 1760, but revived with the cession of the district to the English in 1760."[34] By the end of the 18th century "the volume of trade was diverted to Calcutta, the result being that the *sair* duties of Hooghly fell from Rs. 2,39,548 in 1757 to Rs. 62,644 only in 1783. Throughout these years the East India Company held monopoly of the sea-borne trade with India."[35] The Company's European servants in Bengal carried on trade privately in the interior, "either with the tacit permission of their superiors or clandestinely." The Company "had factories or commercial residencies for the manufacture or purchase of exportable goods, e.g., at Golaghor (near Magra) and Haripal in this district. . . . In 1793, on the renewal of Company's charter, private individuals were permitted to trade in all articles other than piece-goods and military or naval stores; and British residents in India were allowed to act for foreigners and to export annually a certain quantity of goods in the Company's ships. In consequence of this measure, the value of the Company's export from Bengal fell from Rs. 1,14,00,151 in 1792-93 to Rs. 34,65,190 in 1805-06; while the value of goods exported from Bengal to London by private persons and by the Company's commanders and officers increased from Rs. 84,08,800 in 1795 to Rs. 1,31,97,400 in 1801. The articles usually exported on behalf of the Company were piece-goods, raw silk, saltpetre, sugar, opium, hemp and, occasionally, indigo.

"As the Company's administrative work increased with the expansion of their territory, they withdrew more and more from trade. . . . By the Act of 1833, renewing their charter for 20 years, Parliament deprived it of all its commercial privileges, and by 1836 the commercial residencies and *aurungs* or factories were abolished, leaving private trade and industry free from any rivalry on the part of the Company. In 1827 the post of Customs Collector at Hooghly was abolished, his duties being amalgamated with those of the Collector of Land Revenue; and in 1837 the customs duties were abolished. Figures given by the Collectors of Hooghly for the district trade between 1819 and 1833 show a gradual increase in its value from Rs. 39,99,796 in 1819 to Rs. 69,41,490 in 1833, the exports always largely exceeding the imports and being on the average five to six times as great. During the next sixty years (1840-1900) the trade of Hooghly grew steadily. In the first twenty-five years its growth was rapid owing to the opening of the East Indian Railway, the improvement of roads and waterways, and, in a minor degree, the

establishment of steamer services along the Hooghly. In the next thirty-five years the increase was slow, for the people suffered terribly from Burdwan fever."[36]

In the beginning of this century the trade of the district was, as mentioned by O'Malley, "almost entirely with Calcutta and Howrah, the principal entrepots being connected with those places by road or river. The chief exports are:—rice and paddy from the Arambagh subdivision and fine rice from the other two subdivisions; pulses, vegetables and fruits, sold at Sheoraphuli and Bhadreswar; cotton cloths from the Serampore mills, and hand-loom cloths, specially those called Farasdanga; jute, ropes and gunny-bags from the mills of the Serampore subdivision; bricks and tiles from the brick-fields along the Hooghly; tusser cloths from Bali Diwanganj; brassware from Bansberia; and fine sand quarried from the Saraswati near Magra. The principal imports are rice, wheat, *ghi*, salt, tobacco, spices, jute, piece-goods, kerosene oil, coal, timber and lime. The crops of common rice and wheat raised in the Sadar and Serampore subdivisions being insufficient for local consumption, those grains have to be imported from Calcutta, Bihar and the neighbouring districts. Salt is brought from the *golās* at Salkhia, kerosene oil from Budge-Budge, jute from Eastern Bengal, *ghi* from up-country or Calcutta, English piece-goods, yarns and spices from Calcutta, coal from Burdwan and Manbhum, and lime from Burdwan and Sylhet. No reliable statistics of imports and exports are available, but the general impression is that the exports largely exceed the imports, thus leaving a balance of trade in favour of the district."[37]

In 1926 the Collector of Hooghly reported[38] that intermediaries of various types played a vital role in the marketing of important agricultural produce of the district. In the case of paddy, the trade channel usually ran from the producers through intermediate petty traders, known as *fariās*, *bepāris* and *āratdārs* to rice-millers, rice merchants, retail-sellers and exporters in successive order. In the Sadar and Serampore subdivisions, because of good transport facilities, the producers could make direct cash sales of paddy to the *āratdārs* to the extent of about half the quantity that came to their godowns, the other half being brought in by the *fariās* or *bepāris*. The easy accessibility of selling marts kept the profits of *bepāris* low, usually 9 paise per maund The *āratdār* generally got a fixed rate of profit on the market rate, normally 6 paise per maund for credit sales and 2 to 5 paise per maund for cash sales. The profits of the mills ranged between 37 and 50 paise per maund. The notoriously bad communications in the Arambagh subdivision forced the producers there to be entirely dependent on the *bepāris*, which deprived the former from getting as good a value for their produce as fell to their counterparts in other subdivisions. The entire potato crop of the district was lifted by the *bepāris* who brought them in carts or by

rail to the principal marts at Chandernagore and Sheoraphuli. Their margin was about 12 paise and that of the *āratdārs* up to 6 paise per maund. The producers did not ordinarily get good value for their potatoes for want of cheap and safe methods of storage. In the case of jute, the channel of marketing lay from producers to *bepāris*, then to mills or *āratdārs* or merchants and finally to exporters. The profits of *bepāris* accrued mainly from the difference in buying and selling weights—the former being 42 to 44 seers a maund and the latter 40 seers. Tricks in weighing, watering, and adulterating jute were often other sources of profit. Vegetables were brought to the towns by the *bepāris* who in turn sold them to the retailers, the profits of the former varying from 6 to 12 paise in the rupee.

In 1959-60 the import of agricultural produce into the district exceeded its exports by about Rs. 4.40 crores. Rice and paddy constituted the bulk of the imports followed by jute, oil-cake, mustard oil, pulses, seed and table potatoes and cane *gur*. Exports comprised mainly table potatoes, jute, rice and bananas.[39]

In 1964-65 important articles of agricultural produce passing through the marts of Sheoraphuli, Champadanga, Tarakeswar, Bowbazar-Khalisani and Pandua were potatoes, jute, bananas, oil-cake and *gur*. Bulk of these arrivals was despatched outside the district. The table below[40] indicates the volume of transactions made in this behalf during 1964-65. Following the imposition of restrictions on the trade in rice and paddy except on Government

TRANSACTIONS OF AGRICULTURAL PRODUCE IN IMPORTANT MARTS OF HOOGHLY DISTRICT DURING 1964-65

Commodity	Market	Arrivals (in lakhs of quintals)	Value (in crores of rupees)	Places where despatched	Percentage of despatches to arrivals
Table potato	Sheoraphuli, Champadanga, Tarakeswar	25	11.74	Calcutta, 24-Parganas, Howrah	75
Seed potato	Sheoraphuli	1	0.80	-ditto-	60
Jute	Sheoraphuli, Champadanga, Tarakeswar, Pandua	7	9.63	Calcutta, Howrah, 24-Parganas, Kalna	80 (approx.)
Banana	Sheoraphuli, Bowbazar-Khalisani	9.5	5.82	24-Parganas, Calcutta, and various other places outside the State	75 (approx.)
Oil-cake	Sheoraphuli	1.5	0.90	—	—
Gur	,,	1	0.80	—	—

account since 1965-66, their turnover in these markets has been severely curtailed.

Besides the aforesaid commodities, the district exports a substantial quantity of handloom products from various centres under the police stations of Dhaniakhali, Jangipara, Haripal, Arambagh, Pandua, Chinsura, Chandernagore, Serampore and Guptipara to Howrah *Hāṭ* and Burrabazar in Calcutta, *chikan* embroidery work from villages in Dadpur and Dhaniakhali thanas and some quantity of brass and bell-metal products from Bali-Diwanganj (Goghat P.S.) and Khamarpara in Bansberia. The district also exports silk and jute products, cotton textiles, rubber manufactures, engineering goods, automobiles, glass, medicine, paper, alkali and other chemicals. It imports coal and miscellaneous industrial products, chiefly consumer goods, from various places outside the district. No authoritative information about the volume and value of these articles of import and export is available.

Regulated markets

Regulated markets are restricted chiefly to transactions in rationed articles in areas covered by statutory rationing and are looked after by the staff of the Food & Supplies Department.

Centres of wholesale business

Apart from the centres mentioned above, the following marts dealing in wholesale-cum-retail business of jute, potato and some quantity of vegetables need special mention.[41]

Centre	Quantity handled in 1964-65 (in lakhs of quintals)	
	Jute	Potato
Haripal	1	3
Chanditala	2	2
Jangipara	1.5	2
Seakhala	1	0.5
Singur	1	2.5
Dhaniakhali	1	1
Mullick Kasem *Hāṭ*	0.3	1
Magra	0.5	1
Kalipur	0.1	0.1

Retail marketing centres

Important retail marketing centres are located at Masat, Jangalpara, Rajbalhat, Rashidpur, Balagarh, Dasghara, Badanganj and Khanakul which deal specially in jute, potatoes and vegetables.

Fairs and *melās*

The fairs and *melās* held chiefly on religious occasions are of great economic importance for marketing of agricultural produce in rural areas where they are primarily concentrated. A comprehensive list of fairs and *melās* held in the Hooghly district round the year showing their location, time, occasion, duration and approximate total

attendance, as far as available from the District Census Handbook, Hooghly and from the District Magistrate concerned is given in an Appendix to this Chapter.

Co-operation in trade

There are 14 large-sized primary co-operative agricultural marketing societies in the district, some of which played a limited role in the marketing of paddy and rice, specially on behalf of the Government during 1965-66. Their position as on 30 June 1966 is given in the following table.[43]

Name of Marketing Society	No. of members	Paid-up share capital (Rs.)	Working capital (Rs.)	Value of sales (Rs.)	Profit (+) Loss (−) (Rs.)
Arambagh Large-sized Primary Co-operative Agricultural Marketing Society Ltd.	96	31,655	1,90,679	17,60,943	(+)38,176
Polba-Magra ,,	383	62,380	1,02,889	4,45,035	(+)23,774
Goghat ,,	118	52,025	1,00,157	12,03,788	(+) 8,202
Palashpai ,,	163	35,550	58,050	—	(−)13,231
Pursura ,,	143	20,525	39,291	1,00,803	(−) 2,744
Haripal ,,	247	34,039	1,93,063	2,32,300	(+) 2,131
Balagarh ,,	675	26,652	44,789	3,63,577	(−) 1,947
Pandua ,,	197	31,048	74,971	9,16,718	(+)12,070
Jangipara ,,	179	35,170	51,288	3,96,600	(−) 6,175
Chanditala ,,	271	35,452	72,789	9,58,801	(+)13,076
Singur ,,	243	26,637	51,721	3,19,825	(+) 5,968
Dhaniakhali ,,	193	12,075	15,653	2,56,300	(−) 89
Chinsura ,, (now defunct)	—	—	—	—	—
Tarakeswar ,,	918	45,324	75,544	7,14,857	(+)11,117

Besides, there are 2 wholesale consumers' co-operative societies in the district; their position, as on 30 June 1966, is given below.[43]

	Serampore Wholesale Consumers' Co-operative Society Ltd.	Chinsura Wholesale Consumers' Co-operative Society Ltd.
No. of members (including individuals, primary stores and State Govt.)	203	286
Working capital (including Rs. 1 lakh as contribution of State Govt. to each society)	Rs. 4,44,130	Rs. 7,21,920
Purchase	Rs. 42,21,618	Rs. 71,03,551
Sale	Rs. 48,21,618	Rs. 70,09,013
Profit	Rs. 31,112	Rs. 70,918

State trading procurement

Under the procurement scheme of the State Government, 15,900 tonnes of rice constituting 21.34 per cent of the target fixed for the district for 1965-66 was collected up to 9 April 1966. The Food Corporation of India has since been entrusted with the task of

procuring rice and paddy on behalf of the Government from the current (1966-67) harvest season.

Fair price shops

There was a total of 243 fair-price shops functioning under the jurisdiction of Hooghly Sub-control during the period of modified rationing and on the introduction of statutory rationing with effect from 5 January 1965. These shops have been converted into A. R. Shops. There are at present 268 such shops including 38 primary co-operative stores operating in the Hooghly Extended Area. The average annual offtake from all such shops and the value thereof are as follows: rice, 1,121 quintals, worth Rs. 1,07,616; wheat and wheat products, 1,036 quintals, worth Rs. 60,088 and sugar, 335 quintals, worth Rs. 47,235.[44]

Merchants' associations

Most of the industries of the district, big or small, are affiliated to some merchants' association or other having their headquarters at Calcutta.

Consumers' associations

Mention has already been made of consumers' co-operatives which have become very popular in the urban areas and the number of such organizations is increasing.

Organs for dissemination of trade news

Some of the bigger industrial units like the Hindusthan Motors Ltd. and the Dunlop India Ltd. have their own 'house magazines' for disseminating trade news etc. But this work is done principally by the commercial journals and newspapers published from Calcutta. The Calcutta Station of the All India Radio also broadcasts trade news regularly.

Weights and measures

Before the introduction of the metric system, the units of weight in use in the district were the maund, seer, *pôā*, *chhaṭāk*, *kānchchā*, *tôlā*, *bhari*, *rati*, ton, hundredweight (cwt.), pound, ounce etc. The weight of one seer varied from 80 to 86 *tôlās* at different places in the district. The old-time units for measuring distance or length were *krôs* (2 miles), mile, furlong, yard, cubit, foot, inch etc. Liquid measures were, maund, seer, *pôā*, *chhaṭāk*, gallon, pint etc. For the measurement of land the units used were, acre, *bighā*, *kāṭhā*, *chhaṭāk* etc. Besides, measuring bowls made of cane, bell-metal etc. and known as *doān*, *pāli*, *khhunchi*, *khāthā* were used mainly for retail transactions in rice and paddy. The weight of one *doān* or *khāthā* varied from 1 to 3 seers. One *pāli* or *khhunchi* was equivalent to 2½ seers. With the introduction of the metric system, units of weights and measures like the tonne, quintal, kilogram, gramme, kilometre, metre, litre etc., are progressively coming into use in all transactions in place of the old ones.[45]

APPENDIX

DETAILS OF FAIRS HELD IN HOOGHLY DISTRICT

Place of occurrence	Month of Occurrence: English Calendar	Month of Occurrence: Bengali Calendar	Religious or other occasion	Duration (No. of days)	Attendance (approximate)
POLBA AND DADPUR P.S.					
Polba	June-July	Asharh	Rathajatra	2	--
,,	July-Aug.	Sravan	Jhanpan	1	—
,,	Feb.-March	Phalgun	Sivaratri	1	—
Talchinan-Sanihati	June-July	Asharh	Rathajatra	2	500
Paranchapur	,,	,,	,,	2	2,000
Nagarpara	March-April	Chaitra	Mahanader Jat	15	4,000
Ekbalpur	June-July	Asharh	Rathajatra	2	500
Sugandha	Feb.-March	Phalgun	Doljatra	1	2,000
Puinan	,,	,,	Sivaratri	7	—
,,	June-July	Asharh	Rathajatra & Punarjatra	2	2,500
Dhalarbagan	Feb.-March	Phalgun	Pir Saheber Mela	1	—
Dhorela	May-June	Jyaishtha	Jhanpan	1	—
Sonatikri	,,	,,	Snanjatra	1	—
Salukgar	June-July	Asharh	Rathajatra & Punarjatra	2	600
Sultangachha	,,	,,	,,	2	—
Seiah-Hattala	,,	,,	,,	2	—
Dumurpur	Jan.-Feb.	Magh	Pir Mela	1	500
Akna	March-April	Chaitra	Charak	1	800
Makhalpur	May-June	Jyaishtha	Snanjatra	1	—
,,	June-July	Asharh	Rathajatra & Punarjatra	2	—
Meria, Rajballavitala	Sep.-Oct.	Aswin	Jagat Gauri Manasa Mela	1	—
DHANIAKHALI P.S.					
Sah Bazar	Jan.-Feb.	Magh	Pir Ali's Mela	1	4,000
Dasghara	June-July	Asharh	Rathajatra	2	12,000
Seapur	Sep.-Oct.	Aswin	Manasa Puja	5	4,000
Kanuibanka	Jan.-Feb.	Magh	Pirer Urs	4	—
Ghanarajpur	Oct.-Nov.	Kartik	Rasjatra	7	30,000
Mahmudpur	,,	,,	,,	1	30,000
Barul	April-May	Baisakh	Achal Ray's Gajan	1	—
Dhaniakhali	May-June	Jyaishtha	Snanjatra	1	—
Dasghara	June-July	Asharh	Rathajatra & Punarjatra	2	5,000
Bhastara	,,	,,	,,	2	700
Bhandarhati	,,	,,	,,	2	—
Dhaniakhali	,,	,,	,,	2	2,000
Jolkul	September	Aswin	Ananta Chaturdasi	1	--
PANDUA P.S.					
Bhaira	September	Bhadra	Jhanpan	1	—
Somragari	,,	Aswin	Manasa Jhanpan	1	—
Pandua	Jan.-Feb.	Magh	Pir Mela	One month	40,000
,,	June-July	Asharh	Rathajatra & Punarjatra	2	5,000
Basudebpur	,,	,,	Shah Bahadur Saheb Pir Mela	1	—
Panchgara	March-April	Chaitra	Sitala Jhanpan	1	--
Haural	May-June	Jyaishtha	Mahishmardini Mela	8	2,700
Bhonpur	June-July	Asharh	Padmabati Mela	1	500
Sonatikri	—	—	Id	3	1,000

DETAILS OF FAIRS HELD IN HOOGHLY DISTRICT

Place of occurrence	Month of Occurrence		Religious or other occasion	Duration (No. of days)	Attendance (approximate)
	English Calendar	Bengali Calendar			
PANDUA P.S. (contd.)					
Boinchi	June-July	Asharh	Rathajatra & Punarjatra	9	3,000
Belun	"	"	"	2	800
Jamgram	"	"	"	2	800
Dwarbasini	May-June	Jyaishtha	Bishahari Jhanpan	1	—
BALAGARH P.S.					
Guptipara	March-April	Chaitra	Ramnavami	1	1,000
"	June-July	Asharh	Rathajatra	2	15,000
"	Feb.-March	Phalgun	Doljatra	1	1,000
Nutan Char-Krishnabati	May-June	Jyaishtha	Snanjatra	1	1,000
Bakulia	Dec.-Jan.	Poush	Kali Puja	1	—
Alisagaria	Jan.-Feb.	Magh	Oleswari Puja	1	800
Tildanga	"	"	Dharmaraj Puja	1	1,000
Somra	April-May	Baisakh	Noajan Thakur Puja	1	1,000
Inchhura	July-Aug.	Sravan	Bishahari Jhanpan	1	15,000
Debipur	"	"	Bishahari Puja	1	—
Jagulia	April-May	Baisakh	Jogeswari Mela	3	1,000
Ektarpur	Feb.-March	Phalgun	Sivaratri	7	500
Kamarpara	March-April	"	Brindaban Jiu Utsav	5	700
"	Jan.-Feb.	Magh	Maghi Purnima	3	4,000
Basna	June-July	Asharh	Rathajatra	1	—
Mundukhola	Jan.-Feb.	Magh	Dharmaraj Puja	3	3,000
Sripur	Oct.-Nov.	Karttik	Rasjatra & Bindhyabasini Puja	15	50,000
Sripur Bazar	July-Aug.	Sravan	Brahma Puja	2	—
Sija	June-July	Asharh	Rathajatra	2	600
Dakshin Gopalpur	"	"	"	9	1,000
Kalyansri	April-May	Baisakh	Basanta Buri Jhanpan	1	700
Barail	May-June	Jyaishtha	Dasahara Manasa Puja	1	—
Rukespur	Jan.-Feb.	Magh	Sivaratri	7	2,000
MAGRA P.S.					
Hoera	June-July	Asharh	Rathajatra	1	2,000
"	Aug.-Sep.	Bhadra	Manasa Puja	1	2,000
Minajpur	May-June	Jyaishtha	Bhairab Sannyasi Mela	1	—
Magraganj	June-July	Asharh	Rathajatra	2	5,000
Adi Sptagram	Dec.-Jan.	Poush	Sreemat Uddharan Dutta Mahotsav	3	6,000
Krishnapur	January	Magh	Uttarayan	1	—
Tribeni	Jan.-Feb.	Poush	Poush Sankranti Mela	1	1,000
CHANDERNAGORE P.S.					
Chandannagar Town	April-May	Baisakh	Akshaya Tritiya	13	—
"	Nov.-Dec.	Agrahayan	Jagaddhatri Puja	4	2,00,000
"	March-April	Chaitra	Borai Chandimata Puja	—	—
BHADRESWAR P.S.					
Dhitara	May-June	Jyaishtha	Snanjatra Jhanpan	9	4,000
Mankundu	Nov.-Dec.	Agrahayan	Ras Mela	7	1,000

Place of occurrence	Month of Occurrence: English Calendar	Month of Occurrence: Bengali Calendar	Religious or other occasion	Duration (No. of days)	Attendance (approximate)
SINGUR P.S.					
Kamarkundu	Oct.-Nov.	Karttik-Agrahayan	Ras Mela	30	—
Basubati	Jan.-Feb.	Magh	Gokul Dewan Pir Mela	12	—
Balarambati	June-July	Asharh	Rathajatra & Punarjatra	2	1,200
SERAMPORE P.S.					
Mahes	June- July	Asharh	Rathajatra, Punarjatra & Snanjatra	8	1,00,000
Baidyabati	,,	,,	,,	7	—
Serampore	Feb.-March	Phalgun	Khetramohan Saha Mela	21	20,000
UTTARPARA P.S.					
Kotrung	Dec.-Jan.	Poush	Manik Pirer Utsav	3	2,500 (daily)
Bhadrakali	Feb.-March	Phalgun	Doljatra	7	12,000
Raghunathpur	March-April	Chaitra	Charak	1	1,500
CHANDITALA P.S.					
Seakhala	Sep.-Oct.	Aswin	Bisalakshi Puja	1	5,000
,,	June-July	Asharh	Bisalakshi Jat Utsav	1	5,000
Nababpur	Jan.-Feb.	Magh	Pirer Urs	1	1,500
Garalgachha	June-July	Asharh	Rathajatra & Punarjatra	2	—
Banamalipur	,,	,,	,,	2	1,000
Kumirmora	Jan.-Feb.	Magh	Pir Mela	1	1,000
JANGIPARA P.S.					
Rajbalhat	June-July	Asharh	Rathajatra	2	1,500
,,	Sep.-Oct.	Aswin	Rajballavi Devi Puja	3	8.000
,,	Dec.-Jan.	Poush	Poush Sankranti	4	—
Khurigachhi	March-April	Chaitra	Dakate Kali Puja	2	2,500
Atpur	June-July	Asharh	Rathajatra	2	500
,,	Feb -March	Phalgun	Doljatra	1	500
Furfura	,,	,,	Pirer Utsav	3	1,00,000
Hijali	Jan.-Feb.	Magh	Bishalakshi Puja	1	—
Kaparpur	Dec.-Jan.	Poush	Kali Puja	1	10,000
Janda	,,	,,	Makar Sankranti	1	1,500
Prasadpur	June-July	Asharh	Rathajatra & Punarjatra	2	—
Rasidpur	,,	,,	,,	2	—
GOGHAT P.S.					
Bajua	April-May	Baisakh	Gajan	1	—
Raghubati	Jan.-Feb	Magh	Mahotsav	3	—
Jot Chandi	March-April	Chaitra	Chandir Gajan	4	800
Bengai	,,	Baisakh	Gajan	1	600
,,	June-July	Asharh	Rathajatra	2	600
Sitanagar	,,	,,	,,	2	—
Gobindapur	Feb.-March	Phalgun	Birthday Anniversary of Sri Ramakrishna Deva	3	700

Place of occurrence	Month of Occurrence: English Calendar	Bengali Calendar	Religious or other occasion	Duration (No. of days)	Attendance (approximate)
GOGHAT P.S. (contd.)					
Nabasan	June-July	Asharh	Rathajatra	2	500
Kamarpukur	Feb.-March	Phalgun	Sri Ramakrishna Utsav	3	15,000
Syambati	,,	,,	Sivratri	3	7,000
Dhulepur	Dec.-Jan.	Poush	Makar Sankranti	3	8,000
Mohanpur	March-April	Chaitra	Ramnavami	3	—
Garulia Bhatsala	April-May	Baisakh	Smasan Kali Puja	2	900
Jagatpur	Dec.-Jan.	Poush	,,	1	700
KHANAKUL .P.S.					
Kisorpur	Feb.-March	Phalgun	Doljatra	5	1,000
Bandipur	Jan.-Feb.	Magh	Mahotsav	3	1,000
Mayal	June-July	Asharh	Rathajatra	2	500
Mahishgote	Oct.-Nov.	Karttik	Rasjatra	2	500
Ghashua	Feb.-March	Phalgun	Doljatra	1	500
Pilkhan	,,	,,	Sivaratri	3	1,000
Ghoshpur	Jan.-Feb.	Magh	Sree Panchami	1	1,000
Paschim Thakurani Chak	,,	,,	Mahotsav	2	3,000
Raghunathpur	March	Phalgun	,,	2	—
Krishnanagar	June-July	Asharh	Rathajatra	2	500
,,	Oct.-Nov.	Karttik	Rasjatra	—	1,500
,,	Feb.-March	Phalgun	Doljatra	1	500
Khanakul	—	—	Bhim Ekadasi (Siva Puja)	2	500
,,	Feb.-March	Phalgun	Sivaratri	2	500
Kumarhat	April-May	Baisakh	Bhagabati Puja	1	—
Nandanpur	Jan.-Feb	Magh	Rathajatra	9	1,500
Ban Hijli	Dec.-Jan.	Poush	Jagadish Utsav (Poush Sankranti)	5	1,000
Marakhana	March-April	Chaitra	Baruni Snan	1	5,000
Chakrapur	Oct.-Nov.	Karttik	Kali Puja	2	20,000
Rautkhana	April-May	Baisakh	Siva Puja	1	800
Gaurangapur	June-July	Asharh	Rathajatra	2	500
Atghara	Oct.-Nov.	Karttik	Rasjatra	1	—
Ballpur	Jan.-Feb.	Magh	Ganga Puja	3	3,000
Natibpur	Sep.-Oct.	Aswin	Durga Puja	10	1,500
,,	Feb.-March	Phalgun	Hari Sava	4	2,000
,,	Jan.-Feb.	Magh	Pirer Urs	2	500
Pansuli	March-April	Chaitra	Ramnavami	1	2,000
PURSURA P.S.					
Soaluk	Feb.-March	Phalgun	Doljatra	2	500
,,	Oct.-Nov.	Karttik	Rasjatra	2	500
Deulpara	June-July	Asharh	Rathajatra	2	8,000
Alati	Dec.-Jan.	Poush	Sabitri Utsav	1	500
Balarampur	June-July	Asharh	Rathajatra	2	1,200
Akri Fatehpur	Jan.-Feb.	Magh	Gopinath Jiu Utsav	1	1,200
TARAKESWAR P.S.					
Maktarpur	June-July	Asharh	Rathajatra	2	900
Tarakeswar	Feb.-March	Phalgun	Sivaratri	2	20,000 (daily)
,,	March-April	Chaitra	Taraknather Gajan	5	1,00,000
,,	July-Aug.	Sravan	Sravani Utsav	—	—
Tyagra	June-July	Asharh	Rathajatra	2	—
Pratiharpur	May-June	Jyaishtha	Snanjatra	1	—

Place of occurance	Month of Occurance: English Calender	Month of Occurance: Bengali Calendar	Religious or other occasion	Duration (No. of days)	Attendance (approximate)
Pratiharpur	June-July	Asharh	Rathajatra & Punarjatra	2	—
Bhanjipur	"	"	"	2	—
Kulut	September	Bhadra	Viswakarma Puja (Jhanpan)	1	—
Sahapur	"	"	"	1	2,500
Jagajibanpur	July	Asharh	Rathajatra	1	—
HARIPAL P.S					
Haripal	Nov.-Dec.	Agrahayan	Calf Exhibition (secular)	1	—
Naopara	May-June	Jyaishtha	Manasa Puja	8	5,000
Dipa Gaja	June-July	Asharh	Rathajatra	9	1,000
"	Feb.-March	Phalgun	Doljatra	—	—
Chandbati	"	"	"	1	800-900
Kinkarbati	June-July	Asharh	Rathajatra	2	10,000
Bandipur	April-May	Baisakh	Gajan	1	3,000
Atpur	January	Magh	Pir Saheber. Mela	1	—
Bharamallabpur	June-July	Asharh	Sarai Manasa Mela	3	—
ARAMBAGH P.S.					
Dihi Bayara	March-April	Chaitra	Baruni Snan	1	10,000
Malaypur	"	"	Charak	1	—
"	Feb.-March	Phalgun	Doljatra	1	—
Dakshin Rasulpur	May-June	Jyaishtha	Dasahara	2	1,000
"	June-July	Asharh	Manasa Puja	2	700

NOTES

1 Report of the Bengal Provincial Banking Enquiry Committee, 1929-30 (Vol. I). Calcutta, 1930. p. 184.
2 ibid. p. 183.
3 Narendra Krishna Sinha—The Economic History of Bengal (Vol. I) Calcutta, 1961. p. 144.
4 Report of the Bengal Provincial Banking Enquiry Committee, 1929-30 (Vol. I). Calcutta, 1930. pp. 183-84.
5 Narendra Krishna Sinha—op. cit. pp. 148-49.
6 loc. cit.
7 N. C. Sinha—Studies in Indo-British Economy Hundred Years Ago. Calcutta, 1946. p. 19.
8-9 Narendra Krishna Sinha—op. cit. p. 149.
10 Report of the Bengal Provincial Banking Enquiry Committee, 1929-30 (Vol. I). p. 187. Loans are usually advanced on *hundis*, the dealing in which distinguishes the indigenous banker.
11 ibid. p. 185.
12 ibid. p. 74.
13 ibid. (Vol. III). p. 702.
14 ibid. pp. 624-25. Evidence of the Secretary, Krishnabati Co-operative Society, Guptipara.
15 ibid. pp. 505-06.
16 ibid. p. 9 ff. and pp. 100, 507, 627 and 706.
17 *ibid. (Vol. I). p. 68* and report *of the Assistant Registrar of Co-operative* Societies, Chinsura.
18 Census, 1961: Village Survey Monographs No. 1, p. 15; No. 3, p. 18.
19 Source: Agent, State Bank of India, Chinsura.
20 Source: Economist, Department of Economic Studies, United Bank of India Ltd., Calcutta.
21 Source: Manager, United Commercial Bank Ltd., Uttarpara.
22 Source: Branch Manager, United Industrial Bank Ltd., Chandernagore.
23 Source: Registrar, Co-operative Societies, West Bengal and Assistant Registrar of Co-operative Societies, Chinsura.
24 Source: Manager, Hooghly District Land Mortgage Bank Ltd., Chinsura.
25 Source: District Magistrate, Hooghly.
26 Source: Senior Divisional Manager, L.I.C., Calcutta.
27 Source: Regional Director, National Savings, West Bengal.
28 Source: District Magistrate, Hooghly.
29 Source: Secretary, West Bengal Financial Corporation, Calcutta.
30 Source: Accounts Officer, West Bengal Small Industries Corporation Ltd., Calcutta.
31 Source: General Manager, Industrial Finance Corporation of India, New Delhi.
32 Source: Finance Officer, West Bengal Khadi and Village Industries Board, Calcutta.
33 L. S. S. O'Malley and Monmohan Chakravarti—Bengal District Gazetteers: Hooghly. Calcutta, 1912. pp. 187-88.
34 ibid. pp. 189-90.
35 loc. cit.
36 ibid. pp. 191-92.
37 loc. cit.
38 *Vide* letter dated 4.12.26 from Mr. J. T. Donovan, I.C.S., Collector of Hooghly to the Registrar of Co-operative Societies, Bengal.
39-41 Source: District Agricultural Marketing Officer, Howrah and Hooghly.
42-43 Source: Assistant Registrar of Co-operative Societies, Hooghly.
44 Source: Deputy Controller of Rationing, Hooghly.
45 Source: Assistant Controller of Weights & Measures, Hooghly.

CHAPTER VII

COMMUNICATIONS

OLD-TIME TRADE ROUTES AND HIGHWAYS & MODES OF CONVEYANCE

The Jain text *Āchārāṅga Sutra* described the land of *Lāḍha* (the Rarh region of present-day West Bengal) as a pathless country. "The *Baudhāyana Dharmasutra* (*circa* 5th century B.C.) discouraged travels in the lands of Arattas, Karaskaras, Pundras, Sauviras, Vangas, Kalingas. ...But later authorities allowed travels in the Anga, Vanga, Kalinga, Surastra and Magadha countries if they were undertaken for the purpose of pilgrimage. The *Tirthayātrā* section of *Vanaparva* of the *Mahābhārata* refers to Gangasagara (in the extreme south of the 24-Parganas district—Ed.) as a very great *tirtha*."[1]

In the Maurya era, a great highway is believed to have existed from the north-west frontier of India to the capital at Pataliputra. This was the route which Megasthenes seems to have followed to reach the court of Chandragupta Maurya. It is also generally supposed that the road extended up to the mouth of the Saraswati where the ancient port of Tamralipti was situated. Since there is no evidence to prove that Megasthenes travelled further east from Pataliputra ('Palibothra' according to him), any description of this portion of the road cannot be found in his accounts. Kalidasa, the well-known Sanskrit poet, who lived in the 4th and 5th centuries A.D., wrote in connexion with the mythological *dig-vijaya* (world conquest) of Raghu, that he reached the shores of Bay of Bengal, accepted the submission of the Suhmas, and subdued the Vangas who had fought from their boats.[2]

I-tsing, the Chinese traveller, who landed at Tamralipti in A.D. 673, says that when he left the sea-port, "taking the road which goes straight to the west," many hundreds of merchants accompanied him in his journey to Bodh-Gaya. A rock inscription of a chief named Udayamana, which has been assigned on paleogeographical grounds to the 8th century, reveals that merchants from such distant places as Ayodhya used to frequent the port of Tamralipti. Some time after the 8th century A.D., Tamralipti lost its importance on account of the silting up of the mouth of the Saraswati and the consequent shifting of its course. Its place was eventually taken by Saptagram or Satgaon, higher up the river,* which was the Muslim capital of south-western Bengal in the 14th century.[3] Thus the present district,

*"The third stream (meaning Bhagirathi—Ed.) after spreading into a thousand channels, joins the sea at Satgaon (Hugli)." (*Āin-i-Ākbari:* Col. H. S. Jarret's translation. Vol. II. Calcutta, 1949. p. 133). It is very doubtful if Satgaon was situated at the mouth of the Bhagirathi.

a part of the Rarh tract, has a 2000-year old history of being the hinterland of the most important ports of eastern India. Although there is no specific information about a road network in this hinterland, it may not be wrong to assume the existence of at least a few arterial highways there to sustain the busy ports. The principal means of communication in the immediate neighbourhood of the ports was probably the grand military routes from western and northern India which were presumably followed by the Palas, Senas, Cholas and the Eastern Gangas in their military expeditions.[4]

We know very little about the inland transport system of ancient Bengal, much less of the tract now comprising Hooghly district during the Hindu period. The reason for this is that inscriptions, which form the most important source of information regarding the early economic life of the people, do not deal with internal traffic in any detail. Nor do foreign travellers and historians help us in the matter, for their chief interest lay in the foreign trade of the province.[5] Occasional references, in various inscriptions, to *haṭṭa-pati* (superintendent of a market), *pāniya gārika* (supervisor of a rest-house where travellers could get shelter, food and water),[6] *saulkika* and *tārika* (officers in charge of customs, tolls and ferries)[7] testify to the "brisk nature of internal trade" in which the Hooghly district must have largely participated because of its convenient situation near the ports. Possibly Simhapura (Singur), Saptagram, Malliya, Tribeni, Apara-Mandaran, Mahanad, Dwarbasini, Bhurisreshthi etc.[8]—all in the present Hooghly district except the last named place—flourished as secondary centres of trade and commerce. It appears that all these settlements could not have flourished if they were not easily accessible.[9] Contemporary evidence also proves that they were very often emporiums of trade besides being political centres. Further, an analysis of the locations of the ancient towns of Bengal shows that by virtue of their geographical situation many of them could be utilized as junctions of routes by land or by water.[10]

While it is not easy to reconstruct an accurate picture of the state of early communications in this part of the country, the movements of large armies in and through the Hooghly district suggest that there must have been serviceable routes.* In the chapter on History, mention has been made of the invasion of the Rarh tract by Vishnu, the general of the Ganga Emperor Anangabhima III (1211-1238); of the campaign of Ghyasuddin Iwaz Khilji (who first built a flotilla of war-boats as an indispensable part of his armament and also constructed a broad highway through Birbhum, Malda, Murshidabad and Dinajpur districts connecting Gaur, the capital, with Lakhnor

*It has to be noted that "ever since the commencement of Muslim rule, Bengal had been the most intractable of provinces; its capital was nicknamed Bulghakpur (the rebellious city), very difficult to be kept in the leading-strings of Delhi and, therefore, roads became a strategic necessity to the Muslim rulers." (*Vide* J. N. Sarkar—*The History of Bengal* (Vol II). Dacca, 1948, p. 177.)

and Devkot); the invasion of Narasimhadeva I of Orissa in 1243 through the Arambagh subdivision and the confrontation of the Orissan army by the Turks under Tughral Tughan along the broad highway of Iwaz as far as Lakhnor and beyond to the south-east; the battle between Muhisuddin Yuzbak and the Orissan army in A.D. 1253 and 1255 at Mandaran; Zafar Khan Ghazi's expedition against Saptagram and Tribeni at the close of the 13th century; Tughlaq Shah's invasion of Bengal (second decade of 700 A.H.), Bahram Khan's rebellion against the Delhi Sultanate in A.D. 1338; Sultan Firuz Tughlaq's aggression in 1359 (with a mighty army of 80,000 cavalry, 470 elephants and an enormous body of infantry, the advance of which through a pathless terrain was unthinkable) and the invasion of Orissa by Alauddin Hussain Shah. All these military campaigns involving the movement of vast troops across some part or other of the present Hooghly district must have called for the pre-existence of suitable roads to bear this colossal traffic. But the exact routes followed by these mediaeval armies and the extent and condition of the highways still remain a matter for further research.

During the middle of the 14th century, when Sikandar Shah was in power, the three sub-provinces of Lakhanwati, Satgaon and Sonargaon were united under a central authority in Bengal. Such consolidation could not have been possible without a well-knit communication system. Most probably, this unification was one of the reasons why from Sikandar Shah's times to the rise of the Afghans, a period extending over nearly two centuries, "Bengal was not molested by Delhi,"[11] and Saptagram, Tribeni and Mandaran continued to figure prominently in the history of the district. During these peaceful two hundred years the district had witnessed the reigns of Nasiruddin Mahmud I (1442-1459) who is credited in a large number of inscriptions as an erector of "mosques, *khanqas*, gates, bridges and tombs,"[12] and of Alauddin Husain Shah whose dominions were "extensive and well-knit."[13]

Sher Shah (1540-45), during his short reign, introduced horse-post and constructed high roads throughout the land planted with trees and provided with wells and *sarāis* at every two *kōs*—the most important of which was the *Bādshāhi* Road, now known as the Grand Trunk Road.* Great care seems to have been taken for the maintenance of this highway which was fairly well preserved down to the close of the 17th century. Thomas Roe's observation regarding a part

*"The road now known as the Grand Trunk Road is that running from Howrah to Burdwan via Hooghly; but in the forties and fifties of the last century the name was applied to the road from Calcutta to Burdwan via Hooghly town, which crossed the Bhagirathi at Palta Ghat. Still earlier, only the portion which branched north-west from Hooghly to Burdwan was called by this name. Hooghly town was, in fact, a junction, from which one great route ran north-west to Benares, while another road ran north to Kalna and then to Nadia and Murshidabad along the Ganges." (L.S.S. O'Malley and Monmohan Chakravartti—op. cit. p. 196).

of the road from Agra to Lahore is worth quoting: "It is all a plain and the highway planted on both sides with trees like a delicate walk; it is one of the great works and wonders of the world."[14]

In the old Hooghly District Gazetteer, O'Malley and Chakravartti gave a fine account of the roads in the district during the British period.[15] "The first map showing roads in the tract of country of which this district forms part is that of Valentyn, which was based on data collected by the Dutch Governor Van den Broucke (1658-64). Two roads are entered on his map—one, a Padishahi or royal road, extending through Burdwan to Midnapore, and the other, a smaller road, which starting from Burdwan, passed through Salimabad and Dhaniakhali to Hooghly. The former was an important military route, being used by troops in the rebellion of 1696, in the march of Shuja-ud-din to Murshidabad and in the wars of Ali Vardi Khan. With these two exceptions, the district, when ceded to the British in 1765, had no road worthy of the name, but only fair-weather tracks hardly passable in the rains. Bridges were few and far between, and those that existed owed their origin to the generosity and public spirit of some wealthy individual rather than to the Mughal Government. During the next twenty years these tracks were repaired and widened, though roughly and irregularly. From Rennell's Atlas, plate VII (1779), it appears that the most important roads were those connecting Salkhia (Howrah) with various places in the interior. One, running northwards along the west bank of the Hooghly to Ambua near Kalna, passed through Bally, Alinagar, Serampore, Ghiretti, Chandernagore, Chinsura, Hooghly, Bandel, Bansberia, Trebeni, Nayasarai, Dirga and Inchura. A second road passed north-west through Chanditala and Dhaniakhali, to Salimabad in the Burdwan district, while a third went west and then north-west through Kristonagar and Rajbalhat to Diwanganj. Between these main roads lay numerous cross-roads connecting the more important villages, more than a dozen such cross-roads being entered in plates VII and XIX. None of the roads appear to have been metalled.

"In May 1830 the following were reported as the principal roads in the district (1) Bali to Kalna via Inchura, (2) the Grand Trunk Road* from Hooghly to the north of India via Burdwan, (3) the old Benares road, (4) Ghiretti to Dwarhata, (5) Burdwan to Midnapur via Koerganj, (6) Ellipur via Singur to Hooghly, and (7) Hooghly to Bhastara via Polba. The Magistrate reported that these roads were constructed by Government many years before for commercial and military purposes. It is clear that, having made the roads, the Government of the day paid little attention to their maintenance, in spite of

*In the old Howrah District Gazetteer (Calcutta, 1909, p. 119). L.S.S. O'Malley and Monmohan Chakravartti write: "The Grand Trunk Road, which starting from Sibpur joined the main branch at Ghiretti near Chandernagore, was begun in 1804, and completed during the administration of Lord William Bentinck."

numerous complaints. In 1796, for example, the Court of Circuit called the attention of the Governor-General to their wretched state and to the encroachments of zemindars and cultivators on the roadway. In 1815 a similar representation was made to Government by the Superintendent of Police, L. P.; and in February 1830, after an extensive tour through the district, the Magistrate of Hooghly reported that with the exception of the old Benares and Grand Trunk Roads, he 'encountered nothing deserving the name of a road. Thoroughfares are even frequently entirely obliterated, and I have made my way in succession to several villages over no better path than a ridge through intervening paddy fields.' The military authorities were loud in their complaints, the justice of which was admitted by the Magistrate, who in 1837 wrote that he could do nothing without funds 'I am sorry to say that, with the exception of the great lines of communication which are kept up by Government, and which, by the way, are frequently in a wretched state, no provision whatever exists for making or repairing roads or bridges in the interior of the district. There is not a single road in the district which a European vehicle could traverse, while the number passable for hackeries in the rains are lamentably few.'

"Of the roads mentioned in the list of 1830, the Bali-Inchura road was the old Murshidabad road, and the Burdwan-Midnapur road was the old Padshahi road, both shown in Rennell's Atlas. The Old Benares Road* was a later addition, being constructed by Government as the most direct route to the Upper Provinces. The work was under the charge of Captain Rankin, who had to face a number of difficulties. . . . Lieutenant (afterwards Major) W. D. Playfair, who was in charge from 1816 to 1828, put down milestones and divided the road into 7 or 8 sections, each under a road *sarkār*. The road was then 14 feet wide, but the Military Board recommended that it should be widened to 20 feet. In 1828 the road was made over to the Magistrate, and two years later the then Magistrate, Mr. (afterwards Sir) Frederick Halliday, reported to Government the extent to which it had suffered from floods, especially that part of it west of the Damodar. By 1840 the troops had ceased to use the road, and it had, at least in the flooded parts, become no better than a fair-weather track. Even three years before this, only 32 out of 58 bridges were standing, and their arches were being fast worn away."

Toynbee, writing in 1888 on the general state of communications, said that in 1765, the district had only tracks "which were dignified

*"Of the Imperial roads the oldest was the Old Benares Road, called Ahalya Bai's Road, because it was constructed at her cost about 1780 A.D., or the New Military Road, as it was the chief route for troops proceeding to Benares and other stations in the Upper Provinces." (L.S.S. O'Malley and Monmohan Chakravarti—Bengal District Gazetteers: Howrah, Calcutta, 1909, p. 119). A very interesting account of this road will be found in an article entitled 'Routes, Old and New, from Lower Bengal Up the Country' by C.E.A.W. Oldham in *Bengal: Past and Present*. Vol. XXVIII, July-September, 1924.

by the name of roads" and that "the unrivalled water communications of the large rivers and tidal creeks of the district rendered any roads unnecessary."[16] Since Akbar's time the rivers of Bengal, especially the Bhagirathi and the Saraswati throbbed with commercial activity. The navy in Bengal was also efficiently organized at that time. The *Āin-i-Ākbari* states: "Travelling is by boats, especially in the rains, and they make them of different kinds for purposes of war, carriage or swift sailing. . . .For land travel they employ the *Sukhāsan*. This is a crescent-shaped litter covered with camlet or scarlet cloth and the like, the two sides of which have fastenings of various metals, and a pole supporting it is attached by means of iron hooks. It is conveniently adopted for sitting in, lying at full length or sleeping during travel. As protection against sun and rain they provide a commodious covering which is removable at pleasure."[17]

A general description of river communications may also be had from Bernier's account: "On both banks of the Ganges, from Rajemahale to the sea, is an endless number of channels, cut, in bygone ages, from that river with immense labour, for the conveyance of merchandise. . . . These channels are lined on both sides with towns and villages, thickly peopled with Gentiles." But this multiplicity of waterways also brought suffering to the people of Bengal. Bernier himself says elsewhere that the Firinghi or Portuguese pirates of Chittagong "scoured the neighbouring seas in light galleys, called galleasses, entered the numerous arms and branches of the Ganges, ravaged the islands of Lower Bengale, and, often penetrating forty or fifty leagues up the country, surprised and carried away the entire population of villages on market days, and at times when the inhabitants were assembled for the celebration of a marriage, or some other festival. The marauders made slaves of their unhappy captives, and burnt whatever could not be removed." The account given by a Muslim historian, Shihab-ud-din Talish, at the end of the 17th century, shows that Hooghly did not escape the raids of these pirates, for he mentions Hooghly, with Jessore and Bhushna, as places plundered by them when they moved up the Ganges.[18]

Thomas Bowrey, the English traveller who was in India from 1669 to 1679, enumerated in his *Geographical Account of Countries round the Bay of Bengal* four kinds of boats then in use in Bengal, namely the *olocko*, *budgāroo* (*bajrā*), *purgoo* and *boorā*.* He also

*Bowrey, pp. 225-29. The *purgoos* were *pericose* of Ralph Fitch which had 24 or 26 oars to row them, and had a large carrying capacity: Foster, *Early Travels in India*, p. 26. A hundred years later (A.D. 1770) Stavorinus noticed some boats (called *burs*) in Bengal, that "can load fifty thousand pounds weight of merchandise and more," and others, called *pulwāhs*, which "are very long, low, and narrow . . . are not calculated for the conveyance of goods . . . are very expeditious for passing from one place to another." The rooms in the *bajrās*, according to Stavorinus, "are from six to seven feet in height, and are as commodious as if they were in a house."—*Voyages to the East Indies* (Vol. I), pp. 465-67.

mentioned that a very considerable amount of traffic was daily carried on in the great markets of Hooghly, where could be bought and sold all sorts of commodities of Bengal, Orissa and Patna, and the diverse imports from foreign parts. According to Alexander Hamilton, the town of Hooghly "drives a great trade, because all foreign goods are brought thither for import, and all goods of the product of Bengal are brought hither for exportation. . . .It affords rich cargoes for fifty or sixty ships yearly, besides what is carried to neighbouring countries in small vessels." Regarding the navigation on the Bhagirathi, Bowrey observed: "Up and downe the same a very considerable merchandize is drove, and very beneficiall, especially to the English and Dutch nations, haveinge excellent conveniences for carryinge their European commodities up into the inland towns and citties, and the like for bringinge downe the commodities purchased in this or some other kingdoms."

In his *Memoir of Hindusthan* (A.D. 1787), Rennell observes that considering the very large amount of traffic that is carried on in Bengal it is no wonder that the inland navigation gives "constant employment to 30,000 boatsmen."* In the *Good Old Days of Hon'ble John Company*, we find an interesting account of the duration, in 1781, of the river journeys between Calcutta and other important towns in the country.† For instance, a boat journey in those days from Calcutta to Murshidabad would take 25 days, to Dacca 37½ days, to Malda about the same time, to Chittagong or Patna 60 days, to Benares or Goalpara 75 days, to Kanpur 90 days and to Fyzabad 105 days.

Writing about the means of transport and their resultant effect on the trade of the district in the 19th century, O'Malley observed: "During the next sixty years (1840-1900) the trade of Hooghly grew steadily. In the first twenty-five years its growth was rapid owing to the opening of the East Indian Railway, the improvement of roads and waterways, and, in a minor degree, the establishment of steamer services along the Hooghly.[19] In the next thirty-five years the increase was slow,"[20] not because of the Burdwan fever, as suggested by O'Malley, but due to the sad decay of the water transport system. From the *Report on the Hooghly River and its Headwaters* we find that: "over a century ago, great difficulty has always been experienced during the dry season in maintaining a channel of even two to three feet depth for the passage of the ordinary traffic boats and this was

*Rennell—*Memoir of Hindusthan* p. 255. See also Stavorinus, who says. "For carrying goods, carts of a very simple construction are made use of. ... But the transporting of goods is mostly effected by water, through the numerous channels and creeks, with which the country (Bengal) is intersected."—Ibid. (Vol. I). p. 468.

†W. H. Carey—*The Good Old Days of Hon'ble John Company* (Vol. II), p. 15. In the days prior to the introduction of steam navigation, the *budgerows* (*bajras*) were the principal means of conveyance of Government officials and affluent people for travelling between points where communication by water was possible.

almost entirely due to unfavourable conditions at the offtake from the Ganges."[21] By 1915, the service by large inland steam companies had been abandoned and the pilots withdrawn. "This policy has, however, been largely dictated by economic reasons and is not entirely due to greater difficulties of navigation as is sometimes supposed. Railway competition with the Upper Ganges districts was found too strong for the steamer companies, and at the same time increasing trade with the Barisal district served to divert the remaining traffic into the Sundarbans' route."[22] In the following decades, further growth of the Calcutta port and the competition offered by the railways, automobiles and airways finally sapped whatever little vitality was left of the one-time busy inland ports of the district.

ROAD TRANSPORT

Roads with utility commensurate with the requirements of the times have existed in the district over the ages but expansion of highway communication, technological improvement of road surfaces and introduction of locomotion engineering are modern developments. Rapid advancement in communication technology has fostered in recent times the growth of large industrial and commercial undertakings, of urban institutions and populations, of metropolitan communities and a close functional relationship between the metropolitan regions and their surrounding 'Umland', i.e. urban hinterland.[23] Today the road system of the district consists of a network radiating from the towns along the Bhagirathi with a close mesh within the urban areas and a dispersed reticulation in the countryside. Road travel is safer, cheaper, speedier and less hazardous than it used to be even a few decades ago. It is very true that many roads still remain cutcha, narrow and crooked, that many of them are overloaded or in bad repairs, that the vehicles on the roads are slow, inadequate and largely local in nature and important arterial roads like the Old Benares Road or the Grand Trunk Road are not in an optimum state of efficiency. But then State aid for large-scale development of surface communications in the country is an outcome of recent origin and in this background the achievements are significant.

Jayakar Committee

It was only in 1928 that the Road Development Committee, under the Chairmanship of M. R. Jayakar, called for a change in the whole road policy and the Government of India responded by setting up, in 1929, a Central Road Fund (C.R.F.) with the proceeds of a surcharge on petrol. The C.R.F. enabled the Centre to make annual block grants to the Provinces for subsidizing provincial works on roads. But, Bengal had no development plan worth the name and this led to the appointment, in 1934, of A. J. King as Special Officer for Road Development. The King Plan envisaged the provision of feeder roads, neglected so far, and the selection of roads likely to compete with the railways and an integrated communication system

The King Plan

consisting of four different categories of roads. In Hooghly "the examination made and particulars recorded relate to 189 miles of road and 6,235 running feet of bridging which includes 4 major bridges and culverts."[24] A classified list of roads in the Hooghly district in 1937 incorporated in the King's report shows[25] that Government was not responsible for the upkeep of unmetalled roads and that only 46 miles of metalled roads, with an average annual expenditure of Rs. 1,632 per mile, were maintained by the Communications & Works Department and hence were called Government roads.* The District Board directly supervised 118 miles of metalled and 477 miles of unmetalled roads, at an average annual maintenance cost of Rs. 470 and Rs. 36 respectively per mile† while the Local Boards looked after 554 miles of unmetalled roads and incurred an administrative expenditure of only Rs. 15 per mile. King drew up a scheme for 263 miles of improved roads in the district consisting

*L.S.S. O'Malley wrote in the old Hooghly Gazetteer (pp. 196-97) that the new Grand Trunk Road (shown in Rennell's Atlas) from Uttarpara to Palta Ghat, 12 miles 5½ furlongs long with an average width of 25 feet (of which 12 feet in urban areas and 8 feet in non-urban areas were metalled with stone), and the Old Grand Trunk Road from Palta Ghat via Hooghly and Pandua to Burdwan with a length of 33 miles (of which 3 miles passed through the territory of French Chandernagore) with an average width of 24 feet of which 8 feet were metalled with stone and laterite and with iron bridges over the Saraswati at Satgaon and the Kunti at Magra were maintained from the 'Provincial Fund' under the supervision of the Engineer of the District Board.

From the 'Report of the Administration of Bengal 1915-16,' Calcutta, 1917 p. XVI para. 75, we learn that occasionally the Grand Trunk Road used to be under the District Boards and that in 1915-16 the P.W.D., resuming its charge for maintenance, started constructing pucka concrete drains and boundary pillars on either side of the road.

†The position may be compared with that obtaining in 1908 when "the District Board had under its direct control 512 miles of road, of which nearly 80 miles were metalled. Twenty roads were partially metalled or metalled throughout, nine being metalled throughout. Most of the latter are short in length, the principal being the Pandua-Kalna Road (13 miles), the Uttarpara-Kalipur Road (4½ miles), and the Arambagh-Nayasarai Road (6 miles). The metalling is usually 8 feet wide, and consists of stone, brick *jhāmā* or both. The smaller roads are usually 10 to 14 feet wide and the larger roads 14 to 20 feet; but the width rises to 25 feet in the case of old roads like the Benares and Nagpur Roads, while the metalled road from Chanditala to Janai (1 mile 2½ furlongs) is 30 feet wide. The metalling is expensive, repairs alone costing in 1907-08, Rs. 446 per mile as against Rs. 45 in the case of unmetalled roads." L.S.S. O'Malley gave a long list of the principal District Board roads, their mileage, condition and bridges He reported 14 roads and 18 bridges in the Sadar subdivision, 12 roads and 22 bridges in the Serampore subdivision (which included the present Chandernagore subdivision except the headquarters town) and 9 roads with 4 bridges in the Arambagh subdivision. Of these, mention may be made of the Arambagh-Nayasarai Road (6 miles) with two arched bridges as the only way to Burdwan in the rains, the old Nagpur Road (17 miles) from Arambagh to Tetulmari with a masonry bridge, the old Midnapore-Burdwan Road from Pundait to Mandali (15½ miles), the Baidyabati-Tarakeswar Road (21½ miles), with 5 masonry bridges, Nabagram-Charpur Road (13½ miles) with 5 masonry bridges, the old Benares Road from Devipara to Khatul (50 miles) with one wooden, one brick and one iron bridge, Gaja-Rajbalhat (via Dwarhatta) Road (7½ miles) with 3 bridges, Chinsura-Khanpur (via Dhaniakhali) Road (24¾ miles), Hooghly-Manjan Road (18½ miles) with 3 bridges, Chaku Singh's Road from Magra to Khanpur (24½ miles) with three bridges, part of the old Murshidabad Road from Tribeni to Guptipara (16½ miles) with an iron suspension bridge, Boinchi-Dasghara Road (via Dhaniakhali, 8½ miles) with 5 bridges and Pandua-Kalna Road (via Inchura 13 miles) with 2 bridges. (O'Malley—op. cit. pp. 197-99).

of 89 miles of existing metalled, 122 miles of existing unmetalled, and 52 miles of entirely new roads. It provided for one mile of road surface for every 4.5 sq. miles of area inhabited, on an average, by 4,237 persons and serving approximately 1,156 sq. miles representing 97.3 per cent of the total area of the district.* The roads included in this plan are listed below.[26]

Terminal points of roads		Approximate length		Classification
From	To	Miles	Kilo metres	
Bally	Debipur	44	71	Provincial: Trunk
Baigachhi	Keatara	34	55	,,
Paita	Khatul	12	19	,,
Simul-Chowmatha	Harihar	10	16	,,
Sepatingachi	Kirtichandrapur	30	48	District: Main
Chinsura	Bhandarhati	20	32	,,
Bhandarhati	Chanpadanga	12	19	,,
Dadpur	Bakulia	25	40	,,
Inchura	Balagarh	7	11	District: Secondary
Serampore	Sitapur	17	27	Inter-district: Main
Uttarpara	Kalipur	5	8	District: Main
Joyrampur	Palaspai	19	31	,,
Rajhati	Kagnan	6	10	Provincial: Trunk
Arambagh	Badanganj	15	24	District: Secondary
Singur	Mashat	7	11	,,

The Second World War and the Nagpur Plan

The exigencies of World War II necessitated a quick build up of the strategic roads. By the time hostilities ceased, some roads had acquired improved surfaces while the non-strategic ones were sadly neglected. Meanwhile, in 1941-42, the Government of India had frozen the C.R.F. and in 1943 convened at Nagpur a conference of the Provincial Chief Engineers to formulate a coordinated road policy for the whole country. The plan that emerged envisaged the construction of three main categories of roads—national, provincial and local. The national highways were to carry uninterrupted road traffic across the States while the provincial roads were to serve as the main arteries of trade, commerce and administration. The

*This calculation was based on the assumption that a road was capable of serving the country lying within five miles on either side of it overlooking the obstructions offered by unbridged rivers.

local roads were to be of two types: the district roads (further classified into 'major' and 'other') and the village roads; the former branching off from the national or State highways and lying within two to five miles of important villages while the latter were to be the outer links of this network connecting all rural settlements. This is the standard classification of roads all over India today. The King Plan had to be modified in the light of the recommendations of the Nagpur conference and the Government finalized a plan which envisaged the construction and improvement of roads for a period of 20 years beginning from 1946-47. The schedule of priorities was also modified. The details of the pre-partition plan, however, remained much the same in Hooghly district which was territorially unaffected by the partition. The new plan improved upon King's scheme by making provision for village roads and considering the railways complementary to the highways. The table below gives the lengths of different categories of roads scheduled to be built under the revised plan in the Hooghly district and in West Bengal.[87]

Category of Road	Length in Hooghly District		Length in West Bengal	
	Kilometres	Miles	Kilometres	Miles
National Highways	108	67	953	592
Provincial Highways	130	81	1,718	1,067
Major District Roads	256	159	4,755	2,953
Other District Roads	116	72	4,540	2,820
Village Roads	415	258	9,417	5,849
Total	1,025	637	21,383	13,281

Work commenced in 1948 and after it had been in progress for two years, the whole scheme was reviewed by the Planning Commission and the following road-building specifications were laid down in 1951.[88] National and State highways were to have 32′ wide embankments and 12′ wide metalled crusts (water-bound consolidated surface dressed with bitumen or 1″ to 2″ premixed 'carpet' and 4″ cement concrete according to the nature and intensity of local traffic); curves and crossings were to bear an average speed of 40/50 m.p.h. outside urban limits; sufficient roadside land was to be kept on either side for future widening. The district roads were to be similar to the State highways in all respects except that the embankments width was to be 24′ only. The village roads were to have 16′ embankments and could remain cutcha or be provided either with cement concrete or brick trackways and improved culverts so that they may serve as fair-weather roads. During the first two Plans the district made no significant headway in the development of

its roads. The following table[29] gives the mileage of roads in the Hooghly district maintained by the Government and local bodies.

Year	Mileage of roads maintained by the Public Works Department	Mileage of extra-municipal roads maintained by the District Board (including village roads)	Mileage of roads maintained by the municipalities
('M' indicates metalled and 'U' unmetalled road surface)			
1948	48.5 M 8.2 U	130.1 M 1,142.2 U	165.2 M 109.8 U
1953	55.0 M 11.0 U	118.0 M 1,093.0 U	165.0 M 109.0 U
1956	-do-	49.0 M 502.0 U	116.0 M 84.0 U
1958	142.6 M 10.5 U	4,670.49*	218.0 M 129.0 U
1959	170.9 M 10.7 U	31.0 M 989.0 U	162.0 M 115.0 U
1960	215.3 M 20.7 U	33.0 M 957.0 U	225.0 M 126.0 U

*This figure appears doubtful.

The emphasis during the First Plan was on maintenance of the existing roads, in the Second on extending the network to connect all the thana headquarters, during the Third on construction of major bridges and roads of proper standards as also on linking of the villages while in the Fourth the basic objectives have been recast on the basis of the national road development programme (covering a 20-year period from 1961 to 1981) adopted at the all-India Chief Engineers' Conference held in Shillong in 1957. The subsequent recommendations made by the Calcutta Metropolitan Planning Organization in the West Bengal Transport Survey Report of 1965, may also influence Government policy.

The Shillong Plan

The Shillong plan improved upon the Nagpur Plan by formulating a more balanced road system with a combination of (1) direct 'through' routes (expressways), (2) roads for internal communication in an area (not much different from what was envisaged by the Nagpur Plan) and (3) boundary roads of the peripheral type for important towns or groups of villages.* For working out the mileages,

*"As it will not be possible to provide a road to every small village individually, it would be necessary to adopt a system of grouping of villages and providing proper communications to such groups. A population of about 5,000, comprising a cluster of small villages with a sense of closeness to each other, would seem to be a workable community unit. Such grouping would also facilitate the provision of essential amenities like health, educational, social and cultural facilities."—Report of Chief Engineers on Road Development Plan for India (1961-81). New Delhi, 1958, p. 3.

basic factors like area, population, state of present development and possibilities for future development, location of industrial, commercial or service centres, universities, health resorts, tourist centres, and the strategic needs of the country were also considered in the Shillong Conference. In keeping with these objectives, the two 'grid and star' formulae propounded by the Nagpur Plan were modified and the following formulae were accepted for determining mileages of different classes of roads in this district as also elsewhere in India.

"I. National Highways: Mileage $=\frac{A}{40}+\frac{B}{50}+\frac{C}{60}+(20K+\frac{10M}{2})+D$.

II. National Highways and State Highways:

Mileage$=\frac{A}{12.5}+\frac{B}{15}+\frac{C}{20}+(30K+15M+7N+P)+D$.

III. National Highways, State Highways and Major District Roads:

Mileage $= \frac{1}{5}(\frac{A}{5}+\frac{B}{2}+\frac{C}{3})+30K+15M+7N+6P+4Q+1.5R+D$.

IV. National Highways, State Highways, Major District Roads and Other District Roads: Mileage $=\frac{3}{10}(A+\frac{B}{2}+\frac{C}{3})$

$+(30K+15M+7N+6P+8Q+2.5R+\frac{S}{2}+\frac{T}{5})+D$.

V. National Highways, State Highways, Major District Roads, Other District Roads and Classified Village Roads:

Mileage $= \frac{3}{5}(A+\frac{B}{2}+\frac{C}{3})+(30K+15M+7N+6P+8Q+3.75R$

$+S+\frac{T}{25}+\frac{V}{8})+D$.

Where A=developed and agricultural area in square miles ; B=semi-developed area in square miles; C=undeveloped and uncultivable area in square miles; K=No. of towns with population over 1,00,000; M=No. of towns with population between 1,00,000 and 50,000; N=No. of towns with population between 50,000 and 20,000; P=No. of towns with population between 20,000 and 10,000; Q=No. of towns with population between 10,000 and 5,000; R=No. of towns with population between 5,000 and 2,000; S=No. of towns with population between 2.000 and 1,000; T=No. of towns with population between 1,000 and 500; V=No. of towns with population below 500, and D=allowance (assumed as 6 per cent) for future development and other unforseen factors."[30]

No systematic work for implementing the recommendations of the Shillong Conference has so far (February 1967) been done in the Hooghly district. Even the administrative set-up necessary to carry out the Shillong Plan (as suggested in the Masani Committee Report) is not there. Moreover, the staffing pattern in the Transport Ministry at the Centre is as rudimentary as that at the State level.[31] The West Bengal Transport Survey Report of 1965 produced by the C.M.P.O. did not work out the Shillong Conference's 'grid and star' formulae

or provide a clear blue-print. It appears from the published figures† that there is a dire need for evaluating performance, disseminating new ideas and taking stock of the future of road development in the district, the cradle of an important industrial node in India.

During the Second and Third Five Year Plans, the following roads (including village roads marked with an asterisk sign) in the district were newly constructed or improved.[33]

POLBA CIRCLE: Chinsura-Khanpur Road, Hooghly-Majnan Road (3rd to 10th mile), Magra-Polba Road via Meria, Magra-Khanpur Road, Magra-Khanpur Road to Kapastikri*, Chinsura-Khanpur Road to Ramnagar*, Hooghly-Majnan Road to Baligori via Ochal*, Patna to Meria via Kheye* and Patna to Mahanad via Kotalpur*. CHANDITALA CIRCLE: Chanditala-Krishnarampur Road, Nasibpur-Janai Road, Old Benares Road, Atpur-Sitapur Road, Harananda Saha Road, Mashat-Dhitpur Road, Nabagram-Charpur Road, Sheakhala-Rampara Road, Rahimpur-Jangipara Road, Rajbalhat-Paspur Road, Janai-Begampur Road*, Adan-Joykrishnapur Road*, Bandipur-Mamudpur Road* and Kasipur-Krishnanagar Road* PANDUA CIRCLE: Boinchi-Baidyapur Road, Boinchi Bazar Road, Roy B. N. Kundu Bahadur Road, Magra-Khanpur Road, Pandua-Kalna Road, Pandua Station Road, Khanyan-Ilchhoba Road, Pandua-Kalyanpur Road, Pandua-Kulti Road, Khanyan-G. T. Road*, G. T. Road to Berela and Digsui-Pakri Road. DHANIAKHALI CIRCLE: Tarakeswar-Jamdara Road, Dasghara-Madhabpur Road, Chinsura-Khanpur Road, Dasghara-Narayanpur Road via Saha-bazar, Magra-Khanpur Road, Barul-Sonajale Road*, Bidyutpur-Dasghara Road*, Bhandarhati-Mandra Road*. SADAR CIRCLE: Saratchandra Chatterjee Road, Atul Datta Munshi Road*, G. T. Road to Champarui*, Jagannath Tarkapanchanan Road, Somra-Dumurdaha Road, Somra-Digra Road, Jirat-Dwarpur Road, Chandra-Kabura Road*, Naksa-Digsui Road, Trishbigha-Bansberia Road, Inchura-Somra Road*, Balagarh Feeder Road, Magra-Tribeni Road, Mahatma Gandhi Road, Magra-Polba Road, Magra-Khanpur Road and Hooghly-Majnan Road. HARIPAL CIRCLE: Bandipur-Tentulpukur Road, Bhadreswar-Nasibpur Road and Chandernagore-Bhola Road. ARAMBAGH CIRCLE: Arambagh-Bandar Road, Raja Rammohan Roy Road and Arambagh-Tirol Road. GOGHAT CIRCLE: Arambagh-Tentulmari Road, Uchalon-Midnapur Road and Hazipur-Ramjibanpur Road.

The improvement, maintenance and construction of municipal

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†Basic Road Statistics of India, Thirteenth (1962) Supplement issued by Government of India, Delhi 1965, incorporates back-dated, estimated and incomplete figures for West Bengal, *vide* pp. 66-68 & 72. Moreover, districtwise mileages of municipal or extra-municipal roads maintained by the P.W.D. and local bodies could not be obtained. Districtwise break-up of revenue from State motor vehicle taxes, tolls and sales tax on petrol and high speed diesel oil is also not available.

roads have been dealt in the chapter on Local Self-Government. The local Block Development offices also attend to betterment of rural roads and the improvements effected through this agency till about the middle of 1965 are given below.[33]

	Kilometres	Miles
Pucka roads constructed	29	18
Cutcha roads constructed	190	118
Improvement of cutcha roads	361	224
Contributory village roads	40	25

Major road development projects in the district include the Durgapur Expressway and the National Highway No. 2 By-pass between Bally and Adi Saptagram, the latter having since been completed. The Durgapur-Asansol and Calcutta conurbations have led to a serious congestion of traffic on the Grand Trunk Road. "The Durgapur Expressway was projected as the only answer to this problem. A recent survey of road transport conducted by the Ministry of Transport in connection with the economic assessment of the Durgapur Expressway reveals that over 75 per cent of all traffic originating from or terminating in the Asansol-Raniganj-Durgapur area moves eastward or southeastward away from the area along the G. T. Road. . . . Goods vehicles account for more than half of the total vehicular traffic along this road. Commodity analysis shows that coal and building materials, together, contribute nearly half the total goods flow. This is only natural because of the vital link that the G. T. Road provides between the rich coalfields on the one hand, and industrial concentrations on the other. The alignment of the Durgapur Expressway runs parallel to the Howrah-Burdwan Chord up to Palsit and then parallel to the existing G. T. Road. The highway will have limited access with only three controlled intermediate entries. The construction of a suitable by-pass for National Highway No. 2 between Calcutta and Adi Saptagram has become a necessity, to avoid the highly congested area between the Vivekananda Bridge and Hooghly. The need for this project was recognized by the World Bank, which is now financing the construction of this project through a loan."[34]

Village roads

In 1961 the Sadar P.W.D. Circle had 32 village roads (39.8 miles), Polba Circle 47 (77.9 miles), Dhaniakhali Circle 39 (73.6 miles), Pandua Circle 34 (48.3 miles), Haripal Circle 33 (74.5 miles), Chanditala Circle 29 (66.8 miles), Arambagh Circle 37 (81.3 miles) and Goghat Circle 46 (111.5 miles) accounting for a total of 573.7 miles for the district. In 1961 there were 297 village roads (573.7 miles) in the district compared to 303 (522 miles) in 1951.[35] There is no doubt that more village roads are needed but the Fourth Plan envisages construction of only 46.0 miles of such roads. All other districts in

West Bengal except Howrah will have a much larger mileage of rural roads constructed during the said Plan period. The geography of the Hooghly district, as a part of the greater Calcutta industrial area, is such that for regional planning, promotion of agro-based industries, sustenance of regional markets and dispersal of small and medium-sized industries in the countryside, a closer and integrated network of village roads is very necessary.[38]

Vehicles and conveyances

The bullock cart is still indispensable and the most economical means of transport in the countryside served mostly by difficult unmetalled tracks. The iron tyres of bullock carts are, however, a menace to the asphalt roads. Use of rubber tyres, the only solution of the problem, is beyond the reach of cart drivers because of their high costs. For medium distances cycles and for longer hauls automobiles are increasingly becoming popular. In course of the 8 years from 1956-57 to 1963-64 there was a 328% increase (from 525 to 2,247), the highest in West Bengal, in the number of goods vehicles registered in the district. The corresponding increase in passenger vehicles was, however, only 103.92% (from 612 to 1,248). The total number of automobiles registered in the district up to 31.3.66 was 5,767.* In 1956 there were 8 tractors and 21,210 bullock carts in the district, the corresponding figures for 1961 being 8 and 33,265.

NO. OF REGISTERED VEHICLES ETC. IN HOOGHLY DISTRICT: 1959-61

	1959	1960	1961
Private car	705	801	903
Jeep	195	197	202
Motor cycle	350	365	391
Taxi	29	19	9
Bus	174	199	247
Private goods vehicle	176	217	259
Public goods vehicle	855	921	963
Others	7	9	12
No. of bus routes	13	17	20
Total bus route mileage	246	299	341
No. of buses on route	174	199	247
Average no. of buses put on road per day	150	165	200
Average no. of persons employed per day	525	600	750
Total No. of passengers served (in millions)	24	28	35

*Source: Secretary, Regional Transport Authority, Hooghly The following table prepared from the 1961 Hooghly District Census Handbook throws light on the growing importance of road transport:

In the early days of road planning, a transport lorry of 5-ton capacity was thought to be the maximum load that could be put on any road. Since the transport cost decreases with the increase in payload, it is not uncommon these days to come across trucks of 10-ton capacity plying on the highways. The 1965 transport survey revealed that the higher the payload, the greater is the distance travelled by a truck. Medium-sized trucks (5-9 tons) are, however, most common, and they carry 73% (approximately) of the total goods traffic. Trucks up to 5-ton capacity mainly cater to local or semi-local needs while those between 5 and 9 tons mostly serve regional centres within and outside the district. The widely varying quality of road surfaces, bridges and culverts and the payload restrictions on inter-State travel are important reasons why heavier trucks are not as popular as they should have been.

Public transport: traffic characteristics, composition and flow of goods

The origin and destination of traffic within the district is scattered and involves numerous short hauls. Definite trends are, however, discernible in the flow of goods as would be evident from the following table[37] covering a sample period of one week in 1965.

COMPOSITION OF COMMODITY FLOW (IN TONNES) ALONG ROAD SECTIONS IN HOOGHLY DISTRICT

Commodities	Road Sections			
	Calcutta-Baidyabati	Baidyabati-Burdwan	Baidyabati-Arambagh	Arambagh-Vishnupur
Products of agriculture	1,157 Up. 2,390 Dn.	945 Up. 1,644 Dn.	135 Up. 1,796 Dn.	85 Up. 336 Dn.
Products of animal husbandry	31 Up. 310 Dn.	11 Up. 273 Dn.	8 Up. 16 Dn.	— 16 Dn.
Products of mines	2,512 Up. 11,554 Dn.	1,068 Up 13,419 Dn.	186 Up. 301 Dn.	77 Up. 3 Dn.
Products of forests	234 Up. 248 Dn.	88 Up. 230 Dn.	51 Up. 40 Dn.	22 Up. 61 Dn.
Building materials	567 Up. 57,793 Dn.	231 Up 2,255 Dn.	96 Up. 3,380 Dn.	56 Up. 64 Dn.
Manufactured agricultural products	1,144 Up. 782 Dn.	444 Up. 597 Dn.	148 Up. 16 Dn.	81 Up. 23 Dn.
Misc. manufactured products	3,920 Up. 3,455 Dn.	1,770 Up. 2,341 Dn.	403 Up. 357 Dn.	310 Up. 284 Dn.
Beverage and provision	644 Up. 104 Dn.	604 Up. 105 Dn.	41 Up. —	43 Up. 6 Dn.
Other misc. commodities	1,848 Up. 453 Dn.	3,227 Up. 817 Dn.	538 Up. 85 Dn.	521 Up. 79 Dn.
Average number of trucks	13,229 Up. 13,758 Dn.	11,976 Up. 12,063 Dn.	1,305 Up. 1,775 Dn.	550 Up. 367 Dn.

The week-long flow data cannot be taken as a weekly average and multiplied by 52 to get the annual volume. The survey does not take into account the seasonal variations and makes no claim that all goods vehicles on Hooghly roads were enumerated.* In spite of these flaws, certain trends revealed by the survey may be outlined.

In the 'down' direction, coal dominates the flow. Similarly, building materials are carried in very large quantities to the centres of industrial and commercial growth. Hooghly district is the largest exporter of sand and the main channels of supply are the Arambagh-Baidyabati and Burdwan-Baidyabati road sections. Along National Highway No. 2 (G. T. Road) "the major commodities moved are products of mines (prinicipally coal, 36%), building materials (34%), products of agriculture (principally grain, 8%) and miscellaneous commodities (22%)."[38] Since the G. T. Road links the Calcutta metropolitan district with the Asansol-Durgapur industrial complex as also the rest of India, it has to carry an enormous variety of goods from the port city to the rest of the country. It is estimated that 12% of the 'up' traffic through Bandel consists of iron and steel, 5% of mineral oils besides substantial quantities of medicines and chemicals. Half of the nation's steel production (as also pig iron and alloy steel) is consumed in the Calcutta metropolitan district[39] and a large part of it reaches its destination through arterial roads in the Hooghly district. Colossal quantities of rice, potatoes, fruits and fresh vegetables consumed in the same area are also carried over these highways.

Public transport: privately owned, State-owned and municipal transport services

In this district, road transport is entirely in the private sector, the only exception being met with on the Arambagh-Durgapur route where State buses have started plying on temporary 'permits'. In 1959 there were 13 bus routes in the district covering 246 miles and employing 174 vehicles. In 1960 the corresponding figures were 20, 341 and 247, and in 1961, 29, 562 and 322 respectively. The following table gives details of the bus services operating in the district in 1966.

As regards the future, the construction of a bridge across the Bhagirathi (the foundation stone of which was laid in January 1967) connecting National Highway No. 2 at Tribeni with National Highway No. 34 at Kalyani; the commissioning of the two Grand Trunk Road by-passes, one from Vivekananda Bridge to Adi Saptagram and another from Saptagram to Simlagarh; the completion of the

*Inter-district commodity movement between Hooghly on the one hand and Darjeeling, Jalpaiguri, Cooch Behar, West Dinajpur, Malda, Birbhum, Murshidabad, Midnapur and Purulia on the other is very insignificant. This indicates poor road linkages. The Farakka Bridge on National Highway No. 34, the Durgapur Expressway, a bridge over the Bhagirathi connecting National Highway No. 2 with National Highway No. 34 (proposed by C.M.P.O.), the Durgapur-Haldia Highway, the Rupnarayan Bridge near Kolaghat on National Highway No. 6 and the Mundeswari Bridge at Harinakhola on the Baidyabati-Bankura-Purulia State Highway will certainly improve the position.

BUS SERVICES OPERATING IN HOOGHLY DISTRICT IN 1966

Name of route	Length		No. of buses plying daily	Remarks (about condition of routes and travelling etc.)
	Miles	Km.		
Chinsura Court to Chinsura Rly. Station	2	3	12	Road condition good
Serampore to Bandel via Chinsura	18	29	40	Road condition good and always crowded
Serampore to Ballykhal (now extended up to B. T. Road Junction)	11	18	43	-do-
Chinsura to Memari	35	56	23	-do-
Uttarpara to Chanditala	5	8	5	Road condition good
Serampore to Chanditala	18	29	5	-do-
Ballykhal to Burdwan	63	101	8	-do-
Bandel to Kalna	30	48	10	-do-
Haripal to Rasidpur via Jangipara	10	16	6	-do-
Haripal to Rasidpur via Rajbalhat	10	16	5	-do-
Boinchi to Baidyapur	6	10	7	-do-
Serampore Court to Tarakeswar	26	42	20	Road condition good and always crowded
Pandua to Kalna	14	23	8	Road condition good
Jirat to Inchura	12	19	—	-do-
Chandernagore Rly. Station to Taldanga	3	5	1	-do-
Tarakeswar to Arambagh	16	26	35	Road condition good and always crowded
Chinsura to Tarakeswar	32	52	15	-do-
Chinsura to Haripal	28	45	13	Road condition good
Chinsura to Pandua via Mahanad	12	19	7	-do-
Harinakhola to Garerghat	18	29	11	Road condition good and always crowded
Arambagh to Badanganj via Goghat	8	13	8	Road condition good
Tarakeswar to Memari	28	45	3	-do-
Chinsura to Dasghara	28	45	22	Road condition good and always crowded

Arambagh to Gourhati	8	13	5	Road condition good
Mashat to Bakpotaghat	21	34	5	-do-
Sheakhala to Chanpadanga	12	19	3	-do-
Arambagh to Vishnupur	36	58	1	-do-
Arambagh to Burdwan	28	45	1	-do-
Kalipur to Ghatal	38	61	1	-do-
Total	576	927	322	

Durgapur Expressway and the opening of a bridge across the Mundeswari will further accelerate the growth of vehicular traffic in the district.

The following table indicates the nature of transport services available in the municipal areas.

Municipal area	No. of bullock carts	No. of cycle-rickshaws	No. of cycles
Konnagar	128	178	3,000
Rishra	50	200	2,500
Uttarpara-Kotrung	292	578	—
Bhadreswar	19	472	—
Champdani	17	112	—
Bansberia	20	463	—
Chandernagore	300	912	—
Serampore	200	418	—

No figures were available for the Hooghly-Chinsura and Baidyabati municipalities and those for cycles could be furnished by only two municipalities. Since cycles need no registration, their numbers given in the above table are approximate. Taxis are available in the larger municipalities, but most of them are unregistered as they are either unlicenced or ply with temporary permits The municipalities in the district have no transport services of their own.

RAIL ROADS

Origin of railways and their impact on political, social and economic life of the district

The first proposal[40] for the construction of a railway in this part of the country was submitted in 1844 to the East India Company by a British firm headed by Mr. R. M. Stephenson, who later became the Chief Engineer of the East Indian Railway. It took about three years to obtain the permission of the French authorities to lay the track across Chandernagore territory. O'Malley and Chakravarti traced the development of railways in the district in the following

words: "The East Indian Railway line from Howrah to Hooghly was opened for passenger traffic on 15th August 1854, and was extended to Pandua a fortnight later, and to Raniganj in February of the following year. Among the subsequent additions to the line, the following may be mentioned: (1) the opening of a branch line to Tarakeswar, a noted place of pilgrimage; the line was constructed by private enterprise and handed over to the East Indian Railway to work on the 1st January 1885; (2) the construction of a branch line from Bandel to Naihati (3 miles) on the Eastern Bengal Railway over the Jubilee bridge at Hooghly . . . and (3) the construction of the Hooghly-Katwa branch, 65 miles long, which is now (1912) in progress.

"The Bengal Provincial Railway line, on the 2 feet 6 inches gauge, was built by a company formed through the exertions of Mr. A. L. Ray. The first section from Tarakeswar to Basua (12.5 miles) was opened to traffic in 1894, the second section from Basua to Magra (18.12 miles) in 1895, and the third section from Magra to Tribeni (2.15 miles) in 1904. This railway line is financed and managed by Indians. There are altogether 16 stations on it, and through communication with Calcutta is afforded by a jetty with a gangway at Tribeni, which connects the line with the steamers of the Calcutta Steam Navigation Company. . . .

"The Howrah-Shiakhala and a branch of the Howrah-Amta light railways traverse thanas Chanditala and Kristanagar (now Jangipara—Ed.) in the Serampore subdivision. Both are on the 2 feet gauge and start from Howrah. The line to Shiakhala is 19 miles long, of which more than 10 miles are in this district; there is also a branch line with a length of 3 miles from Janai to Chanditala. This line was opened up to Chanditala in August 1897, and up to Shiakhala in November of the same year. . . . On the Howrah-Amta line there is a branch from Bargachhia station to Champadanga on the Damodar, which was opened in 1908. Both these light railways are under the management of Messrs Martin and Company."*

To the British colonialists railways in India were primarily needed for better governance of the country as also for wider distribution of British-made goods on the Indian market. The centres of administration and the port cities, accordingly, witnessed the most rapid railway linkages with the rest of the country. In 1833 Lord Dalhousie had expressed the hope that the Indian railways would in the end be so remunerative as to relieve the State of the onus of

*L.S.S. O'Malley and Monmohan Chakrabatti—op. cit. p. 204. The exact dates when the Howrah-Amta and the Howrah-Sheakhala lines were first opened for traffic are 1.7.1897 and 2.8.1897 respectively, *vide* Final Report of the Committee on Transport Policy and Coordination, Government of India, Planning Commission. New Delhi, 1966. p. 298. The 1961 Hooghly District Census Handbook, however, gives 1901 as the date when the Howrah-Sheakhala Martin Light Railway was opened, *vide* op. cit. p. 419.

guarantee. He maintained that should it prove otherwise, a part of the costs might be 'cheerfully borne' by the Government in view of the administrative advantages to be derived from rail transport. The evils inherent in the absolute guarantee system* were, however, found far too onerous from the Indian tax-payers' point of view and in 1869 Lord Lawrence urged the adoption of direct State construction.[41] The companies were only to supply the capital and receive interest thereon from the Government irrespective of the outlay and the performance of the undertakings. This led to the serious evil of extravagantly constructed lines exemplified from the fact that while in Australia the cost per mile of single-track railway construction was £12,000 and in Canada only £8,500, that in India, under the old guarantee system, was £16,536. Such costly investment, however, fetched no more than a 3 per cent return, thus leaving the remaining 2 per cent to be borne by the tax-payers. This happened in spite of the fact that the early railways naturally took over the most paying fields for such enterprise, traversing very populous and rich regions.[42]

Financial difficulties did not, however, permit the Government to resume the railways or construct new ones and in 1879 fresh contracts† were signed with the companies. In 1905 a Railway Board was established at the head of the railway system under the Ministry of Commerce and Industry.[43] In 1908 the Mackay Committee on Railway Finance recommended an annual programme of capital expenditure. Since 1914, due to the stress created by World War I, drastic reduction of expenditure and non-availability of rolling stock and essential replacements from abroad, the Indian railways suffered badly.

In 1920 a special committee under the chairmanship of William Acworth was appointed to go into the old evils of mixing up railway revenues and expenditure with those of the general civil and military administration and the unsuitability of company management of Indian railways.[44] Following its recommendations, the East Indian

*The main terms under which the contract of the East India Railway Company was guaranteed were: (1) free grant of land; (2) a guaranteed rate of interest ranging from 4½ to 5 per cent according to prevailing market rates and payable at 22 pence per rupee; (3) utilization of half of the surplus profits to repay the Government any sums by which they might have had previously to make good the guarantee of interest, the remainder belonging to the shareholders; (4) reservation of certain powers of supervision and control by the Government in all matters of importance except choice of staff; and (5) option to the Government to purchase the lines after 25 or 50 years on terms calculated to be equivalent of company's share therein.'

†The chief differentiating features in the terms of these modified contracts were (*i*) the lines constructed by the companies were declared to be the property of the Secretary of State for India, who had the right to determine the contracts at the end of approximately 25 years after their respective dates, or at subsequent intervals of 10 years, on repaying at par the capital provided by the companies: (*ii*) interest was guaranteed on the capital raised by the companies at a lower rate, mostly at 3½ per cent, and (*iii*) Government retained a much larger share, usually three-fifths of the surplus profits, for their own benefit.

Railway was taken over by Government on 1 January 1925 followed by others. Until the outbreak of World War II, many reorganizational schemes were introduced on the recommendations of various expert committees including the one headed by R. L. Wedgewood.

The cessation of hostilities in 1945 and the partition of the country in 1947 necessitated a complete reappraisal of the railway administration and Government accepted many of the recommendations of the Indian Railway Enquiry Committee appointed in 1947 under the chairmanship of H. N. Kunzru. The Hooghly district, however, did not receive the full benefit of these changes as the Bengal Provincial Railway, the Howrah-Sheakhala and the Howrah-Amta light railways continued to be in the private sector and out of the regrouped zonal system recommended by the Kunzru Committee, intended to make the railways more efficient and uniform in their practices.

The rationalization of the Indian railways led to the merging of the E.I.R. into the Eastern Railways in April 1952 which, again, was split up into the Eastern Railways and the South Eastern Railways in August 1955 with divisional components (the actual working units) functioning under each. The Hooghly district is served by the Howrah and Sealdah Divisions of the Eastern Railways with their headquarters located outside the district at Howrah and Sealdah respectively.

Passenger and goods traffic and role of the Eastern Railways in the economic life of the district

The Howrah-Burdwan Chord line was opened to regular traffic in 1921.[45] The Report of the Administration of Bengal (1915-16) states that this 45.26 miles long route was 'partially opened' during that year[46] and formally opened from 1 January 1917.[47] The District Census Handbook, Hooghly (1961), however, mentions 1913 as the year of its opening (*vide* p. 419). This very busy section providing a direct route between Howrah and Burdwan through this district has been electrified since 2 October 1965.[48] Even before electrification, it carried, in 1958-59, more than 18,000 net tons per route mile per day.[49] Electrification of the Howrah-Bandel-Burdwan and Sheoraphuli-Tarakeswar sections was completed in December 1957.[50] Electrification of these three sections of the Eastern Railway running through the district has been a great boon to numerous local traders and commuters as increased frequency of train services and substantial reduction in transit time have been achieved. Use of diesel engines is another recent feature. These locomotives have a higher haulage capacity. It is estimated that such new modes of traction together with remodelled marshalling yards at major railway stations will increase the line capacity by at least 40 per cent.* As a further

*A factor determining the extent of electric traction which might worry planners is that of profit and loss. It is found that electric train services are incurring substantial loss every year. Concentration of traffic during peak hours and cheap fares are the main reasons behind this unremunerative service. *Vide*

improvement, modern methods of traffic control like route-relay, interlocking and automatic synchronized signal system may be introduced for achieving operational efficiency and two to threefold increase in line capacity with the existing assets.[51] It may, however, be mentioned here that the alignment of Railway tracks within the district leaves some areas entirely uncatered for, e.g. the Arambagh subdivision which is not served by any railway at all.

Besides the many long-distance trains running through the district, a number of local trains, mostly Electrical Multiple Units, serve the sections falling within it. The following table gives the number of local trains plying on week-days (February 1967) on these sections.

Route	No. of local trains	
	Up	Down
Howrah-Bandel	57	57
Howrah-Sheoraphuli	20	20
Howrah-Burdwan (Main line)	18	18
Howrah-Tarakeswar	14	13
Howrah-Burdwan (Chord line)	13	11
Seakdah-Dankuni	13	11
Bandel-Naihati	11	11
B.A.K. Loop	9	9

The latest available figures in respect of passenger and goods traffic originating from the main stations on the Eastern Railway within this district as also the corresponding earnings are given in Appendix A at the end of this chapter.

In 1950 all the private railways operating in the district were Class III railways (i.e. with gross earnings of less than Rs. 10 lakhs a year). Of these the Chanditala-Janai branch of the Howrah-Sheakhala Light Railway, the Bengal Provincial Railway and the Dasghara-Jamalpurganj Railway were abolished during the last decade. On the retention or otherwise of such uneconomic railway lines the Government stand has recently been clarified.* The follow-

Final Report of the Committee on Transport Policy and Coordination, Government of India, Planning Commission, New Delhi, 1966. pp. 47-48.

*The Committee on Transport Policy and Coordination, 1966 observed that while each instance of an uneconomic branch line requires separate study on merits, certain general consideration may be summarized as follows. A branch line should be viewed both as an entity in itself and as part of a wider network and it should be ascertained whether on either ground its retention is necessary. Secondly, the total transport requirements and facilities in an area served by the branch line should be examined. Thirdly, attention should be given both to past trends and to traffic expected over the next few years. If substantial alternative facilities have been or are capable of being developed at no higher cost to the economy, there should be no hesitation in giving up an existing unremunerative branch line. In a developing economy, there cannot be undue rigidity in regard to means of transport, so long as the overall requirements can be satisfactorily met. It further suggests that where road transport has to be expanded con-

ing table gives full details of Class I (i.e. with gross earnings exceeding Rs. 50 lakhs a year), Class II (i.e. with gross earnings between Rs. 10 and Rs. 50 lakhs a year) and Class III railways in the district including those which have since ceased to operate.

RAILWAYS IN HOOGHLY DISTRICT: THEIR CLASS, GAUGE, LENGTH, NO. OF STATIONS, OWNERSHIP & WORKING AGENCY

Name of Railway & its Class	Gauge	Total length within the district (Approx.)	No. of stations within the district 1950	1966	Owned and worked by
Howrah-Amta Light Railway (Class III)	2′0″	21 km. (13 miles)	7	8	Howrah-Amta Light Railway Co. (subsidized by the District Board)
Howrah-Sheakhala Light Railway (Class III)	2′0″	16 km. (10 miles)	8	9	Howrah-Sheakhala Light Railway Co. (subsidized by the District Board)
Howrah-Sheakhala Branch Railway (Class III)	2′0″	5 km. (3 miles)	2	Nil	Since abolished
Bengal Provincial Railway (Class III)	2′6″	52.8 km. (33 miles)	14	Nil	,,
Dasghara-Jamalpurganj Branch Railway (Class III)	2′6″	13.4 km. (8.4 miles)	2	Nil	,,
Eastern Railway (Class I) (a) Main Line	5′6″	60 km. (37 miles)	19	21	Govt. of India
(b) Howrah-Burdwan Grand Chord Line	5′6″	45 km. (28.1 miles)	12	16	,,
(c) Tarakeswar Branch Line	5′6″	32 km. (20 miles)	10	10	,,
(d) B.A.K. Loop Line	5′6″	40 km. (25 miles)	8	10	,,
(e) Dankuni-Sealdah Branch line	5′6″	Not available	1	1	,,
(f) Bandel-Naihati Branch line	5′6″	5 km. (3 miles)	2	2	,,

That the light railways have fared badly in recent years in relation to the State-owned railways in the country will be evident from the following table giving comparative percentage increase

siderably to facilitate discontinuance of unremunerative lines, the Railways may consider, in consultation with the State Government, whether and in what form they could participate or assist in the growth of road transport services. Thus the Committee is in favour of inviting the remunerative railways to face competition from which they had been protected so long.

in passenger and goods traffic and earnings therefrom in 1964-65 taking 1956-57 as the base year.

	State-owned railways in the country	Howrah-Amta Light Railway	Howrah-Sheakhala Light Railway
Passengers carried	48.90	15.63	33.01
Earnings from passengers	71.31	24.19	47.08
Goods carried	183.16	15.09	35.71
Earnings from goods	99.00	8.59	33.34

Both the light railways in their representations to the Government from time to time have pointed out that they were facing serious competition from road transport both in passenger and goods traffic. According to Messrs. Martin Burn, their Managing Agents, the net earnings of the Howrah-Amta Light Railway had gradually declined since 1957-58 but showed a significant increase in 1964-65. On the other hand, there was a steady decline in the net earnings of the Howrah-Sheakhala Light Railway. The revenue of Howrah-Amta Light Railway from goods traffic increased from Rs. 4,47,902 in 1960-61 to Rs. 5,08,973 in 1964-65. Earnings from goods traffic on the Howrah-Sheakhala Light Railway came down from Rs. 58,961 in 1960-61 to Rs. 48,130 in 1964-65.[58] (These figures relate also to the Howrah district served by these railways).

Currently (February 1967), the Howrah Maidan-Chanpadanga section of the Howrah-Amta Light Railway is served by 12 Up and 10 Down passenger trains of which only 4 in the Up and 5 in the Down directions are regular dailies. On the Howrah Maidan-Sheakhala route there are 10 regular dailies out of a total of 14 in each direction. A slightly depleted service works on Sundays.

The great advantage of motor transport lies in its flexibility enabling it to penetrate almost anywhere without being tied down to a particular route. Road building has also made considerable progress since independence inaugurating, in many areas, duplicate transport services to compete with the railways. Road transport can provide for door to door collection and delivery without involving many of the irksome formalities inherent in railway carriage. The rates are also cheaper and the haulage safer over short distances. For distances up to 100 km. from the Calcutta port, road transport of goods is normally more efficient and economic than rail transport. All these factors lead to an unhealthy competition between these two modes of transport in the district. On the railways, again, more valuable articles are charged at a proportionately higher rate than heavy, low-grade commodities which do not bear the full overhead charges. Road hauliers, on the other hand, base their fares mainly on the cost factor enabling them to take away the 'cream' of the railway

traffic from the latter. Broadly speaking, where quality of the goods or convenience of distribution are not the main considerations, the railways have held their ground against road transport which usually serves industries depending on local supply of raw materials while the railways cater to those which collect the raw materials or sell the products on a countrywide basis. From the table on passenger and goods traffic on the Eastern Railways in 1962-63, given in Appendix A at the end of this chapter as well as from the findings of the West Bengal Transport Survey Report, 1965, it will appear that considerable loss of revenue due to competition with roadways was registered at Uttarpara, Baidyabati, Mankundu, Chandernagore and Chinsura where railway earnings from goods traffic were much less than those of other stations on the main line. There has not been any assessment in this district of the role of motor transport in bringing to the rail-heads a large volume of long distance traffic in addition to relieving the latter from congestion in short distance traffic. Nor has there been any study of the role of the railways as a supplier of traffic to the other modes of transport. Without such findings the district cannot be guarded from the development of wasteful duplicate transport services.*

WATERWAYS, BRIDGES & FERRIES

The trunk railway lines, in their initial stages, promoted river traffic; it was the branch lines penetrating deeper into the country which deprived the rivers of their role as feeders to the main-line stations.[53] At the instance of the East India Company, surveys of river-borne traffic on the Bhagirathi were first undertaken by Rennell in 1764-65, followed by Colebrook in 1801 and 1807. In 1828, using Colebrook's maps, Captain Thomas Prinsep investigated the suitability of the river for steam navigation†. His report was so favourable that by Bentinck's time (1834) there were regular steamer services from Calcutta up to Allahabad. An important reason for the growth of river traffic in this region was the discovery of coal in Bengal which was carried much more economically along the waterways.‡

*The Committee on Transport Policy and Coordination recognized (*Vide* its report; pp. 24-29 & 270-86) that "Apart from reckoning cost elements of a social nature falling outside the customary costs of operators, even in estimating the latter there are several problems of method and approach on which much work remains to be done." However, the Railway Board carried out a study of the costs of goods traffic as well as that of individual functional services like marshalling, line haul, transhipment etc. based on the accounts for 1962-63. The Committee on Transport Policy and Coordination itself carried out in 1959-60 a pilot investigation into the costs of road transport services. More recently, the World Bank Study Team on Coal Transport has made a study of the costs of haulage of coal by railways, road transport, coastal shipping and other modes of transport, such as ropeways and pipelines.

†It is said that the first steamboat plied on the Bhagirathi in 1823 and the first passenger steamer connected Chinsura and Calcutta in 1826.

‡"Mr. Albert Robinson, after studying navigation on the Mississippi and the peculiarities of the Ganges, built in 1844-47, on behalf of the Ganges Navigation

Crawford in his Hughli Medical Gazetteer gave an interesting account of river communications in the district at the turn of the century.[54] "The great bulk of the water-borne traffic of Hughli district is carried by the Bhagirathi river, which, before the railway was constructed, was the main artery, and in fact almost the only means of transit for bulky goods. . . . The Calcutta Steam Navigation Company Limited run a daily service of steamers from Hatkola *Ghat*, Calcutta to Kalna in the Burdwan district. . . . The steamers employed are mostly sternwheelers, of very small draught, and carry a large number of passengers, and light goods, but not much heavy goods. . . . The following are the stations at which the steamers call, with their distance from Hatkola *Ghat*, Calcutta in miles. Those on the east bank are distinguished by an asterisk. All those on the west bank, except Kalna, are in the Hughli district; Chandernagore, of course, being French territory.

Name of Station	Distance in miles from Calcutta	Name of Station	Distance in miles from Calcutta
Calcutta (Hatkola Ghat)	—	Tribeni	33
Uttarpara	6	Sijai	36
Serampore	14	Kaliganj*	39
Sheorafuli	15	Jirat	41
Nawabganj*	16	Gaurnagar*	42
Bhadreswar	18	Sripur (Balagarh)	44
Chandernagore	19	Somra	48
Bhatpara*	20	Baira	54
Chinsura	23	Santipur*	58
Hughli	26	Guptipara	60
Bansberia	31	Kalna	64

" . . . The Hughli (Bhagirathi--Ed.) can carry country boats and river steamers of any size up as high as Hughli all the year round, and in the rains right up to its origin from the Ganges The other

Company five steamers to run single-handed between Calcutta and Allahabad. This was an important departure from the system of towing accommodation boats or cargo flats. The 'Patna', one of these steamers, which was constructed in Millwall, and put together in Calcutta, made her first voyage to Mirzapur in September 1846, and the Press of the day had notices of her 'rapid' passage made in 11½ days. The new departure however did not meet with the success it deserved, owing to losses incurred through lack of proper pilotage. The Ganges Company received its final blow in a violent cyclone which occurred in 1864 and was shortly afterwards absorbed by the India General Steam Navigation Company. Running steamers single-handed was not again adopted, except for ferrying, until the Assam Mail Service was started in 1883." (J. Johnston—Inland Navigation on the Gangetic Rivers. Calcutta, 1947. p. 29).

rivers of the district are navigable only in the rainy season. . . . The Magra *khal*, or Nayasarai *khal*, which is the Hughli outfall of the Kana *Nadi*, will float large country boats at high tide all the year round up to Magra village, some 2½ miles from the river Hughli. The Bali *khal* will carry similar boats for about half a mile. The Kana *Nadi* and Saraswati will carry a fair-sized *dinghi* in the rains, but no boat of any sort in the dry season. The Bali *khal* in the rains carries boat traffic for a considerable distance. The Mundeswari will float a large *dinghi* at all seasons for some fifteen miles up from Ranichak, at least as far as Harinkola, where it crosses the old Benares Road, and large country boats as far as Khanakul."

In 1912 O'Malley found that there were only 10 important waterways in the district, most of which were seasonal in character: "(1) the Hooghly . . .; (2) the Damodar (25 miles), navigable by boats up to 1,000 maunds in the rains; (3) the Rupnarayan, navigable from Bandar downwards to Ranichak (6 miles), by river steamers in the rains and by boats of 20 maunds at other times of the year; (4) the Dwarakeswar, 20 miles down to Bandar, navigable by boats of 500 maunds in the rains; (5) the Behula Khal, 15 miles, by boats of 200 maunds in the rains; (6) the Kunti Khal or Kana Nadi, 40 miles, by small boats for about 20 miles up to its junction with the Ghia, and by large boats of 500 maunds throughout its course in the rains; (7) the Saraswati, 22 miles, by boats of 100 maunds in the rains; (8) the Dankuni drainage channel by boats of 20 maunds; (9) the Bally Khal, 8 miles, by boats of 10 maunds in the dry season and of 50 maunds in the rains; (10) the Mundeswari or Kana Dwarakeswar, from Bandar northwards for 10 miles, by boats of 100 maunds in the rains."[53]

Reasons for decline of inland navigation

Although during the second quarter of the 19th century steamships had made their appearance, country boats were by and large the principal means of water transport in this part of the country. The first departure from this state of affairs came with the construction of the Grand Trunk Road between 1839 and 1842. We have also noticed in Chapter I that during the 18th century a serious deterioration occurred in the upper reaches of the Bhagirathi owing to an alteration in the course of the Damodar, which, debouching until then at Naya Sarai, assisted in scouring the Bhagirathi channel. With the diversion of this tributary, the Bhagirathi channel began silting up. The consolidation of the banks and extension of jetties into the stream all along the industrial area below Tribeni accentuated the process by obstructing the natural flow of flood-tides causing accretion along the banks and diminishing the swing of the ebb-tides.[54] The already restricted traffic on the Bhagirathi further declined with the coming of the railways.

Johnston analyzed the causes of shrinkage of Gangetic navigation in the following words: "The great majority of the Ganges tributaries

are navigable only in the rains; in consequence the maximum number of journeys made by country boats doing the direct trip from up-country. . .was not more than two per annum, and in most cases only one. . . .Further, the great bulk of the traffic was in grain or cotton. The worst time of the year to transport either of these commodities is in the rains; yet for vast areas, it was this time of the year or nothing. The country boat has either no deck, or at most, a rudimentary one, so that the cargo was liable to be thoroughly soaked by rainwater. . . .It is emphatically not an economical cargo carrier. . . .Another reason against country boats is the uncertainty of their travel. . . .Lastly, . . .country boats cannot carry sufficient bulk of cargo. The number of boats and men employed per thousand maunds of cargo is at much too high a ratio.

"The main factors in transport are bulk and speed. The country boat is suited for neither. In fact, it would not be too much to say that even before the days of railway competition, the capacity of all the country boats it was possible to build and manpower available to man them was insufficient to handle anything like the total potential trade in riverine areas. . . .It is further important to note that the organisation of river traffic had no machinery for onward transhipment or delivery. Not every destination is at or near the river bank. . . .The railway provided the reliable means of transport required and the result was a gravitational change of commercial centres from the river bank to the railway lines. . . .The railways made possible traffic in small consignments of miscellaneous goods—a sort of traffic which was quite outside of the scope and capacity of country boatmen, who never dealt in less than a boatload at a time. In the absence, of onward delivery arrangements for such small consignments, the boatmen could not hope to compete in this class of traffic even if they had ever contemplated starting it."[57]

Another important cause of decline of water transport was the prevalence of riverine dacoities and the inability of the Government to prevent them. While the insurance companies charged high rates for country boat cargoes, the Government on the other hand was more prone to encourage private railways as it had undertaken to guarantee their profits.[58] The steamer companies did not therefore expand in proportion to the decline in country boat traffic The Calcutta Steam Navigation Company had stopped operating the Calcutta-Kalna service long ago. During the turmoil of World War II, the Armenian Ghat-Ranichak and the Ghatal-Bandar services were discontinued. The Report on the Survey of Minor Ports in India by S. Nanjundiah, Officer on Special Duty, Ministry of Transport, Government of India does not mention a single 'minor port', 'sub-port' or even 'petty port' in the whole of West Bengal.*

*This report does not bear the time and place of its publication. Moreover, it does not provide any data to justify the omission.

At present, excepting the Bhagirathi, the D.V.C. navigation canal, the Rupnarayan, the Dankuni drainage channel and the Bally Khal, all the waterways in the district, so important in the past, carry traffic only during the rains. The Dwarakeswar from the village of Chander to Tungi Balarampur (about 30.6 km.) is navigable from July to September. The Mundeswari is navigable during the same period from Soalak to Mahishuda Damkunda, a distance of about 43.5 km. The Rupnarayan, however, is navigable throughout the year from Thakurani Chak to Mora Khana, 17.7 km. away. The existing boat freight in the district varies around Re. 1 per maund per 20 miles.[59]

Construction & maintenance of waterways

No sustained effort appears to have been made so far to maintain and improve the waterways in the district and there has been no development of inland water transport coordinated with other means of conveyance. The Dankuni and Rajapur drainage works, completed in the last quarter of the 19th century, were not designed to serve navigational purposes though they subsequently provided an avenue of commerce through the Bally Khal, Dankuni drainage channel and the Baidyabati Khal. In recent years emphasis has been more on irrigation than on navigation. In 1959 the Inland Water Transport Committee suggested that while actual execution of inland water transport schemes might be left to the State Governments, coordination, overall control and financing of projects should be undertaken by the Central Government for at least ten years.* The committee also proposed measures for arresting the decline in country boat traffic. The D.V.C. navigation canal, the only project, was accordingly taken up during the Second Plan and completed in the Third. Early in 1965, the Government of India took over the River Steam Navigation Company which had been operating between the Hooghly conurbation and Assam in the Brahmaputra river system as also Bihar and Uttar Pradesh in the Ganga river system. Following the conflict with Pakistan in 1965, the Company's activities had been restricted within Assam alone. The construction of the Farrakka Barrage may provide an entirely new perspective for the development of waterways in this region. It is estimated that once the D.V.C. navigation canal is fully utilized, the volume of traffic may be as high as two million tons per year with an annual break-up as follows: coal—10,00,000 tons; agricultural products—5,00,000 tons; construction materials —2,00,000 tons; industrial products—2,00,000 tons; colliery stores —50,000 tons and inter-canal transport—50,000 tons. This canal will

*The Central Government has exclusive legislative powers in respect of navigation by mechanically propelled vessels on such inland waterways as may be declared by Parliament to be national waterways. Some proposals are presently under consideration in this connexion. Navigation by mechanically propelled vessels on waterways other than national waterways is a Concurrent Subject. Navigation on all waterways by vessels other than mechanically propelled vessels falls within the State List.

also reduce the pressure on the G. T. Road.[80] (The physical features and navigability of this canal have been described in Chapter I).

Ferry services

According to Crawford, the following ferry services operated across the Bhagirathi at the close of the 19th century from points in Hooghly district (mentioned first) to those on the opposite bank, the first six of which were in Nadia and the rest in 24-Parganas: (1) Guptipara-Santipur, (2) Somra-Gossain Char, (3) Balagarh-Chogda, (4) Jirat-Kaliganj (Sukhsagar), (5) Dumurdaha-Durgapur, (6) Tribeni-Gusti, (7) Bansberia-Kanchrapara, (8) Khamarpara (Bansberia)-Halisahar, (9) Hooghly Bazar-Naihati, (10) Babuganj (Hooghly)-Naihati, (11) Mechuabazar (Chinsura)-Naihati, (12) Sandeswartala-(Chinsura)-Kankinara, (13) Chandernagore-Jagatdal, (14) Telinipara-Shyamnagar, (15) Bhadreswar-Garulia, (16) Ghireti-Ichapur, (17) Chanpdani-Palta, (18) Nimaitala (Baidyabati)-Nawabganj, (19) Chatra-North Barrackpur, (20) Serampore Court-Hospital Ghat, Barrackpur, (21) Ballavpur (Serampore)-Titagarh, (22) Jagannath Ghat (Mahes)-Titagarh, (23) Rishra-Khardah, (24) Konnagar-Panihati and (25) Uttarpara-Ariadaha. These ferries were mostly under zemindari ownership except those at serials 14 and 17 which were under the District Board and 21 under Government management. Government also owned half shares in the ferries at serials 18, 19, 20, 22, 23, 24 and 25.

Elsewhere in the district the District Board ran the following ferries: (1) at Chanpadanga across the Damodar, (2) at Balarampur across the Damodar, (3) at Harinkhola across the Mundeswari, (4) at Haraditya across the Haraditya Khal, (5) on the Burdwan-Midnapur road across the Asathkhali Khal and (6) at Arambagh across the Dwarakeswar.

Many of the ferries mentioned by Crawford still exist. The zemindari ferries are now mostly managed by municipalities, the ownership being shared in different proportions by those on either side of the river. A few of these on the Bhagirathi (e.g. the Mahesh and Chinsura-Naihati ferries) have introduced launches. All existing ferries are far more busy than they were in the past. The Balarampur ferry on the Dwarakeswar earned Rs. 3,085 for the Arambagh municipality in 1965-66. Due to increase of population on both banks of the Bhagirathi, several important ferries have come into operation in recent years. They are the Jugal Addy ferry at Serampore owned equally by the Barrackpur Cantonment Board and the Serampore municipality which runs 2 launches and charges 10 paise per passenger. The Ranirghat and Gondalpara ferries, both within Chandernagore, use country boats and levy a fare of 6 paise per passenger or a maund of goods. New ferry points of importance in the interior of the district are at Gopalpur Ghat and Kunti Ghat in Dumurdaha-Nityanandapur Anchal and at Muktarpur Char Ghat and Rukeshpur Ghat in Sija-Kamalpur Anchal.

The annual revenue of the Mechuabazar-Naihati ferry, Rs. 70,800, is the highest in the district. A few of the busy ferries, namely Chanpdani-Palta, Telenipara-Shyamnagar and Bhadreswar-Garulia have introduced monthly tickets with rates varying for students, passengers with goods or cycles etc. The Government-owned ferries are normally leased out to the highest bidders every year.

Bridges

Between August 1947 and March 1965, 125 bridges and culverts were constructed in the district.[61] The more important of them are the Rammohan Setu on the Mundeswari at Harinkhola (still under construction), the Ramkrishna Setu on the Dwarakeswar at Arambagh and the Vidyasagar Setu on the Damodar at Chanpadanga. The first is expected to cost Rs. 48 lakhs while the second and the third have cost Rs. 11 and Rs. 8.21 lakhs respectively. These three bridges will provide a direct all-weather road link between the Hooghly industrial zone and Arambagh, Vishnupur, Bankura, Purulia, Jamshedpur and Ranchi.

The West Bengal Transport Survey Report, 1965 observed that the Bhagirathi was "a real transport-divide between the districts lying to the east and west of it. As a result, parallel road and rail systems run almost along the two banks of the Bhagirathi with conspicuous absence of adequate cross linkages north of the Calcutta Metropolitan District." Following up the recommendation made in this Report, the foundation stone of a road bridge across the Bhagirathi connecting Kalyani with Bansberia was laid on 2 February 1966. It is scheduled to be completed within the Fourth Plan period at an estimated cost of Rs. 3.42 crores. The bridge will be 1,340 feet long with 230 feet viaducts on either side. The road passing over the bridge will be linked with the Simlagarh-Saptagram diversion, the by-pass of National Highway No. 2; it will cross the Saraswati river, meet the old National Highway No. 2, intersect the Bandel-Burdwan railway line, the Saptagram-Tribeni Road and Bandel-Barharwa railway line. As traffic on the Rabindra Setu (Howrah Bridge) and Vivekananda Setu (Bally Bridge) has already reached saturation point, this new two-lane bridge capable of carrying 23,000 vehicles a day would provide considerable relief.

Air transport & other means of transport

There is no aerodrome or ropeway in the district. The nearest aerodromes are at Dum Dum and Barrackpur in 24-Parganas, Kalaikunda in Midnapur and Panagar in Burdwan districts. Helicopters have been used occasionally in recent times to control pests. But construction of helipads has not yet received serious attention.

TRAVEL AND TOURIST FACILITIES

Dharmsalas existed in the past and also exist now at the principal centres of religious interest in the district, namely Guptipara, Tribeni, Baidyabati, Tarakeswar, Goswami Malipara etc. None of them deserves special mention. Rest houses for touring officials or the

Old-time rest houses & dharmsalas

general traveller are provided by the Government, the Zilla Parishad, autonomous bodies like the Damodar Valley Corporation and, uncommonly, by big industrial companies. A list of such dak bungalows (including a solitary Circuit House at the district headquarters), inspection bungalows, rest houses and pilgrims' lodges is given in an appendix at the end of this volume.

Hotels

Before its merger with India, French Chandernagore had a number of European-style hotels many of which have since closed their doors. Cheap wines, both indigenous and imported, contributed largely to the prosperity of the hotels in the French colony. With the enforcement of Indian excise laws at Chandernagore, the liquor trade declined and with it the hoteliers' business. The Indian-style hotels at the district and subdivisional headquarters or at the pilgrim centres are usually small establishments with indifferent catering and sanitary arrangements. Eating houses thrive at all places attracting the litigant public, transport workers or general travellers but their standards are fairly poor.

Although the district has much to offer to the tourists, activities of travel agents and guides are hardly, if at all, noticeable. The conducted bus trips arranged by the State Tourist Bureau are limited so far to only two places in the district, namely Kamarpukur (Goghat P.S.) and Atpur (Jangipara P.S.).

POSTS & TELEGRAPHS AND TELEPHONES

The Muslim rulers had established in this district, as in other parts of the country, a rudimentary postal system run by couriers who travelled on horseback or on foot. At the time of the East Indian Company, the *harkarā* or the postal runner was a common sight. But the service arranged by the E.I. Company was no better than the old *Nazāmat Dāk*.[62] From the time of Clive to that of Bentinck, the post office was not regarded as a department of public utility and 'Receivers' carried private mail for a consideration. From these transactions sprang the idea of 'selling the service'. Private organizations for carrying letters flourished even after 1837 when the Post Office Act XVII was passed. The bankers had their own runner services called *Mahājan Dāk* which, when patronized by others, proved cheaper than the Company runners thus defeating the intention of the Government to establish a state monopoly on postal communication. There was also no fixed schedule of rates at that time and a few private postal services had been given licences in spite of the Act.[63] Until the opening of the East Indian Railway in 1854 the official postal system continued to compete with private organizations which were more efficient. Harimohan Sen, son of the celebrated Ramkamal Sen and Dewan of the Bank of Bengal from 1844 to 1849, had floated with his own resources in the middle of the 19th century

a horse *dāk* company for carrying mail between Calcutta and Delhi which passed through this district.[64]

Even before 1854, when a new era for the Indian postal system began,* the Hooghly district had developed, for official purposes, a parallel organization connecting the district headquarters with outlying revenue and police stations and controlled by the Collector through his subordinates. The expenditure was met by a cess levied on zemindars and local people supplemented by a Government subsidy. The object of the District Post was to deliver official mail, the details of routes, stages, timings etc. being settled by the Collector in consultation with the Postmaster General, subject to review by the Divisional Commissioner. Delivery of letters was effected through the police and village chowkidars. The nature of service varied from area to area and charges were levied in cash without reference to a standard table of rates. This left the public entirely at the mercy of unscrupulous postal officials.[65] Although the decision to absorb the district postal service into the general postal system had been taken as early as in 1862, it took many more years before the former was finally abolished.[66] By 1871 almost every town possessing a minimum population of 5,000 was provided with a Post Office or a Receiving House. By 1879 cheap inland and foreign postcards came into use in the district and in the following year remittances through money orders were introduced in a number of selected post offices. In 1883 a scheme was launched for utilizing the Post Offices for telegraphic communication.[67] "In 1907-08," wrote O'Malley and Chakravartti, "there were in this district 341¼ miles of postal communication and 105 post offices, or one post office for every 11 miles. The number of postal articles delivered was 35,32,724, viz, 20,93,260 postcards, 11,36,018 letters, 1,18,872 packets, 1,69,338 newspapers and 15,236 parcels. The value of money orders paid was Rs. 15,62,320, and there were 15,785 Savings Bank accounts, the amount deposited being Rs. 11,33,340.

"In the first quarter of the 19th century an experimental semaphore telegraph system was tried between Calcutta and Chunar. The experiment proved a failure and was abandoned before 1830, in which year some of the semaphore towers were utilized for the Trigonometrical Survey of India. In this district five of them still survive at Nalikul, Dilakas, Hyatpur, Mobarakpur and Navasan. In 1907-08, besides the general telegraph office at Serampore, there were five postal telegraph offices, viz, at Chinsura, Hooghly, Magra, Chandernagore and Tarakeswar which issued 6,867 messages."[68]

*On 1 October 1854, the first postage stamp was issued on an all-India basis. In the same year the postal department was also recognized as a separate organization of national importance. A manual of rules, based on the report of a commission appointed in 1850 was prepared on which rests the entire fabric of the present day Indian postal administration. The railway mail services were also opened during the same year.

Present post and telegraph set-up

Since independence, 131 new post offices have been opened in the district. In November 1962 a separate postal division with 3 postal subdivisions having headquarters at Chinsura, Serampore and Howrah, came into existence. Under the Chinsura Head Office (2nd class) there are 39 Sub-offices and 149 Branch Offices, the corresponding numbers under the Serampore Head Office (2nd class) being 23 and 82 and under the Howrah Head Office* (1st class) 7 and 71. The total staff strength in the division is 1,230. (A classified list of all post offices in the district has been given at the end of this chapter as Appendix B.)[69] There is no Departmental Telegraph Office in the district at present but telegraph facilities are available at Chinsura and Serampore Head Post Offices and the following 22 Combined Sub-Post Offices: Angus, Arambagh, Baidyabati, Bandel Jn., Bansberia, Chanpadanga, Chandernagore, Chanditala, Dhaniakhali, Guptipara, Jangipara, Khanakul, Konnagar, Magra, Pandua, Rishra, Sheoraphuli, Singur, Tarakeswar, Telenipara, Tribeni and Uttarpara.

The work-load of the Hooghly Postal Division will be evident from the following table[70] giving the average number of various postal items handled per month.

Money Orders paid	30,654
Registered letters booked	35,648
Registered parcels booked	2,203
Insured letters booked	2,116
Insured parcels booked	236

Telephones

The table at the next page, based on reports received from the General Manager, Calcutta Telephones and the Postmaster General, West Bengal Circle, gives details of the telephone exchanges functioning in the district in June 1969.

Besides, two 50-line exchanges at Dhaniakhali and Haripal are scheduled to be opened within 1969. The first five of the aforesaid exchanges are under the administrative control of the Calcutta Telephones and the rest under that of the Postmaster General, West Bengal Circle.

Radio and wireless stations

Besides a few wireless installations used for defence purposes, there is a 'Gas Grid' wireless station in the district situated at the village of Belmuri (Dhaniakhali P.S.) near the railway station of the same name, about 27.2 km. (17 miles) from Chinsura town. A microwave tele-communication unit, situated nearby, was established by the Post and Telegraph Department.[71] According to the Postmaster General, West Bengal Circle, there were 77,152 radio licences in force in the district on 31 December 1968.

*The accounts relating to these Post Offices are kept by the Howrah Head Office though these are under the administrative control of the Hooghly Postal Division.

TELEPHONE EXCHANGE IN HOOGLY DISTRICT : JUNE 1969

Sl. No.	Name of Exchange	Line capacity	Working connexions
1.	Chandernagore	300	283
2.	Chinsura	400	340
3.	Uttarpara	350	333
4.	Tribeni	300	230
5.	Serampore	600	424
6.	Arambagh	100	92
7.	Khanakul	25	11
8.	Pandua	100	77
9.	Tarakeswar	100	68
10.	Chanditala	100	57
11.	Kamarpukur	25	17
12.	Boinchi	50	42
	Total	2,450	1,974

Organizations of employers & employees

The following registered trade unions of transport workers were functioning in the district in June 1966.

Regd. No. and date of registration	Name & Address of the Union	Membership
3665: 22.3.56	Serampore-Chinsura-Boinchi Bus Workers' Union; Barrabazar, Chinsura, Hooghly.	40
5977: 27.2.64	Hooghly District Motor Drivers' & Cleaners' Association; G. T. Road, Magra, Hooghly.	80
5550: 23.7.62	Serampore Rickshaw Chalak Union; 18, Dharmatalla Lane, Serampore, Hooghly.	150
*4285: 19.2.58	Magra Thana Rickshaw Union; Tribeni, Hooghly.	78

Besides, there are two unions of employees under the Hooghly Postal Division, namely the All-India Postal Employees' Union (Class III) representing the supervisory and clerical staff and the All-India Postal Employees' Union (Class IV) representing the postmen and class IV staff of the Division. With a grant from the Post & Telegraphs Department, these organizations have been able to provide recreation clubs and canteen facilities for their members at Chinsura and Serampore.[72] The employees of the telephone exchanges at Chinsura, Chandernagore, Serampore and Uttarpara have formed a Branch Union with 300 members under the Circle Union of the Calcutta Telephones District. The employers in the field of transport and communications have no organization in the district.

APPENDIX A

PASSENGER & GOODS TRAFFIC DURING 1962-63 AT STATIONS ON EASTERN RAILWAY IN HOOGHLY DISTRICT

Railway Stations	Number of outward passengers	Earnings (Rs.)	Number of inward passengers	Earnings (Rs.)	Volume of Coal (Tonnes)	Earnings (Rs.)	Volume of other goods outward (Tonnes)	Earnings (Rs.)	Volume of other goods inward (Tonnes)	Earnings (Rs.)
1	2	2(a)	3	3(a)	4	4(a)	5	5(a)	6	6(a)
Uttarpara	23,19,783	4,17,703	21,13,623	2,17,710	23	231	×	×	507	9,510
Hind Motor	22,04,205	3,60,891	16,67,305	1,74,173	1,428	16,066	1,506	39,440	9,653	1,21,618
Konnagar	22,47,564	4,47,471	19,43,243	2,38,525	7,980	73,440	2,879	77,956	20,697	3,33,295
Rishra	24,60,593	5,55,002	18,87,203	2,66,204	46,721	4,35,095	29,335	3,60,725	86,799	13,97,003
Serampore	46,09,767	16,89,242	40,05,287	15,39,586	13,838	1,22,968	1,193	4,71,609	62,890	9,19,642
Sheoraphuli	29,32,952	8,35,460	26,84,385	8,44,172	2,126	21,013	1,432	22,190	26,807	3,68,324
Baidyabati	7,96,367	2,06,216	7,48,595	1,64,168	×	×	22	397	187	3,416
Bhadreswar	9,12,877	4,38,948	8,56,269	1,55,251	92,022*	7,81,380*	10,065	2,16,596	90,695	16,91,321
Mankundu	6,91,597	2,47,903	5,96,942	92,174	×	×	×	×	108	2,743
Chandernagore	22,07,206	12,52,060	19,77,592	10,57,120	5,472	57,813	377	5,723	19,582	3,15,174
Chinsura	16,57,364	6,85,029	14,63,753	3,93,684	×	×	50	754	937	1,699
Hooghly	3,05,233	87,261	2,62,669	50,654	1,993*	18,352*	3,293	14,627	20,031	2,81,626
Bandel	15,84,453	11,89,770	14,82,875	14,88,572	44,978*	2,67,577*	4,322	6,258	19,235	12,384
Adi Saptagram	72,061	33,966	86,080	31,764	×	×	356	2,585	5,801	72,870
Magra	5,53,119	2,53,258	4,93,256	2,38,611	9,436	76,282	1,179	10,671	38,160	5,22,482
Talandu	98,694	35,202	93,673	18,933	×	×	×	×	1	10
Khanyan	2,61,729	80,616	2,68,289	85,011	20	181	9,983	53,720	3,172	32,169

APPENDIX A

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1	2	2(a)	3	3(a)	4	4(a)	5	5(a)	6	6(a)
Pandua	5,69,254	2,78,328	5,25,417	2,67,543	152	1,502	23,991	1,54,789	6,767	93,088
Simlagarh	1,06,264	49,116	91,325	33,590	×	×	1,948	10,126	329	3,362
Boinchigram	1,10,132	44,873	1,15,546	43,930	×	×	×	×	×	×
Boinchi	3,55,022	1,86,956	3,40,623	1,40,376	334	3,149	7,513	47,006	5,010	43,559
Bansberia	2,21,541	1,25,541	2,41,696	1,09,433	23,315	2,10,552	13,912	5,95,883	48,705	7,54,158
Tribeni	3,21,409	1,48,645	2,98,793	1,48,706	1,138	9,922	49	236	1,535	34,687
Kuntighat	2,16,174	65,552	1,93,811	68,362	×	×	×	\	×	×
Dumurdaha	74,589	26,942	58,606	18,869	×	×	×	×	×	×
Khamargachhi	2,05,686	72,166	1,40,401	46,511	6,705*	63,958*	29,487	1,84,366	15,555	3,00,065
Jirat	1,79,758	74,264	1,72,845	52,159	103	1,145	199	9,971	311	4,359
Balagarh	1,25,235	59,058	1,29,277	52,092	218	2,463	264	1,174	2,744	50,294
Somrabazar	1,37,837	54,484	1,28,234	40,863	43	493	238	2,294	1,581	18,746
Behula	79.178	25,573	84,236	16,508	×	×	×	×	×	×
Guptipara	1,62,879	94.198	1,65,899	78,956	351	3,484	765	2,424	630	1,934
Diara	3,12,494	62,469	2,82,651	26,896	44	470	55	16	188	1,933
Nasibpur	2,63,384	59,443	1,98.836	19,538	×	×	×	×	×	×
Singur	7,38,478	1,97.615	6.66,203	1,16,552	1,417	15,412	262	14,684	6,971	93,055

Kamarkundu	6,62,193	1,67,019	6,70,901	1,46,312	129	1,231	637	4,814	1,729	16,347
Nalikul	5,02,062	1,62,434	4,42,588	68,440	526	5,598	941	1,759	798	19,164
Haripal	7,87,758	3,05,292	6,60,614	1,77,391	888	9,244	11,006	17,425	5,715	73,920
Kaikala	1,26,495	41,381	1,12,815	24,268	×	×	×	×	×	×
Bahirkhanda	1,42,177	50,522	1,55,723	46,519	133	1,224	104	476	82	735
Loknath	1,26,281	49,917	1,05,987	28,234	×	×	×	×	×	×
Tarakeswar	16,16,586	11,89,491	15,02,160	11,38,804	2,538	18,423	1,325	20,834	9,043	1,33,399
Dankuni	8,88,283	1,88,228	8,41,626	88,512	2,272	21,919	347	1,403	38,606	4,45,385
Gobra	2,05,331	48,695	2,07,309	26,788	×	×	×	×	×	×
Janai Road	4,61,486	1,38,197	3,86,894	26,166	852	9,129	210	10,398	3,463	47,963
Begampur	5,47,519	1,65,898	4,75,438	71,836	×	×	×	×	×	×
Baruipara	3,14,116	87,969	2,96,922	44,122	649	6,648	2,609	25,641	4,518	39,366
Mirzapur Bankipur	1,83,105	60,906	1,66,349	30,768	×	×	×	×	×	×
Balarambati	1,38,189	48,210	1,04,085	28,933	×	×	×	×	×	×
Madhusudanpur	1,97,059	72,295	1,84,759	29,907	×	×	×	×	×	×
Chandanpur	1,64,423	56,322	1,60,913	51,884	1,127	7,432	1,446	6,103	1,715	4,015
Porabazar	73,478	26,655	97,371	25,029	×	×	×	×	×	×
Belmuri	2,48,078	1,14,464	2,34,192	92,017	255	2,229	159	1,220	2,810	30,358
Sibaichandi (Figures not available)										
Hajigarh	92,381	38,060	80,389	25,398	×	×	×	×	×	×
Gurap	1,83,311	99,862	1,68,525	81,346	495	4,547	8,288	51,475	5,265	48,700
Jhapandanga (Figures not available)										

*Only four stations, namely Bhadreswar, Hooghly and Bandel on the main line and Khamargachhi on the B.A.K. Loop registered both inward and outward movement in coal. Figures for the rest indicate only inward movement in coal.

Cross signs indicate nil figures. The first 21 stations are on the main line, next 10 on the B.A.K. Loop, next 10 on the Tarakeswar Branch line and the last 16 stations are on the Burdwan-Howrah Chord Line.

Source: Chief Commercial Superintendent, Eastern Railway, Calcutta.

APPENDIX B

CLASSIFIED LIST OF POST OFFICES IN HOOGHLY DISTRICT: 1966

UNDER CHINSURA HEAD OFFICE

Name of Post Office	Name of Thana	Name of Post Office	Name of Thana
Adcconagar	Magra	Belmuri S, R	Dhaniakhali
Aidakismet S	Balagarh	Belun S	Pandua
Akna S	Polba	Bengai EDSO	Arambagh
Alipur	,,	Bhadreswar PCO	Bhadreswar
Alipur Nayanagar	,,	Bhadur	Goghat
Amra S	Pandua	Bhalia	Arambagh
Arambagh PCO	Arambagh	Bhandarhati S, R	Dhaniakhali
Arambagh A	,,	Bhastara S	,,
Arandi S	,,	Bhitasin S	Pandua
Aima Nababpur S	Pandua	Bhurkunda S	Goghat
Badanganj	Goghat	Bighati S	Bhadreswar
Bagnan S	Dhaniakhali	Bikramnagar EDSO, NDDF Hooghly	Chinsura
Boinchi PCO	Pandua		
Boinchigram EDSO	,,	Bilsora S	Pandua
Bajua S	Goghat	Boharkull	,,
Bakulia S	Balagarh	Borai NDDF Chandernagore	Chandernagore
Balagarh EDSO	,,	Boso S, R	Dhaniakhali
Bali-Dewanganj S	Goghat	Brindabanpur	Arambagh
Bandel Jn. PCO, RS	Chinsura	Burasibasia S	Chinsura
Banna S	Dhaniakhali	Chaitanyabati S, R	Dhaniakhali
Bansberia S, R	Magra	Chandernagore RS, NDDF Chandernagore	Chandernagore
Barahanpur S	,,		
Barul S	Dhaniakhali	Chandernagore Barasat PCO, NDDF Chandernagore	,,
Batanal S	Arambagh		

NOTE: Abbreviations used against the names of Post Offices are explained as below: PCO stands for Public Call Offices; S for Branch Offices handling Savings Bank accounts; R for Post Offices in direct communication with Railway Mail Service; NDDF for Post Offices effecting no delivery of mail which is done by the adjacent Post Office mentioned; A for no delivery: RS for Railway Station; EDSO for Extra-Departmental Sub-Office and B for Post Offices handling no insured mail.

Name of Post Office	Name of Thana	Name of Post Office	Name of Thana
Chandpur	Pandua	Goghat S, R, PCO	Goghat
Cheragram	Dhaniakhali	Golta S	Arambagh
Chinsura Bazar PCO, NDDF Chinsura	Chinsura	Gondalpara PCO	Chandernagore
		Gopalpur	Singur
Chinsura Court PCO, NDDF Chinsura	,,	Goswami Malipara S	Polba
Chinsura RS, EDSO, NDDF Chinsura	,,	Gram Chagram	Pandua
		Gram Kulti	,,
Chinsura Head Office PCO	,,	Gujrat	Khanakul
Chupa S	Dhaniakhali	Guptipara PCO	Balagarh
Chuadanga S	Khanakul	Gurap PCO	Dhaniakhali
Chunait	Arambagh	Gurbari S	,,
Dabra S	Pandua	Hanral S	Polba
Daharkundu	Arambagh	Haral-Daspur S	Pandua
Dakshin Rasulpur	,,	Harit S	Polba
Danrpur S, R	Polba	Hat Basantapur	Arambagh
Debkhanda S	Goghat	Hatni S	Pandua
Devanandapur	Chinsura	Hooghly PCO	Chinsura
Dhaniakhali PCO	Dhaniakhali	Ichhoba-Mandalai	Pandua
Dharmapur NDDF Chinsura	Chinsura	Inchura S	,,
Dhobapara S	Balagarh	Itachuna S, R	,,
Dhulepur S	Goghat	Jamgram S	,,
Digra S	Balagarh	Jirat S, R	Balagarh
Digsui S	Magra	Kadra	Garbeta (Midnapur)
Dihi Bagnan S	Arambagh	Kamarpukur	Goghat
Dihi Boyra	,,	Kanakshaly NDDF Chinsura	Chinsura
Dumurdaha S, R	Balagarh	Kananadi S	Dhaniakhali
Dwarbasini S	Pandua	Kanuibanka S, R	,,
Ektarpur	Balagarh	Kapsit S	Arambagh
Fului S	Goghat	Karui	,,
Gaurhati S	Arambagh	Kaswara	Polba

Name of Post Office	Name of Thana	Name of Post Office	Name of Thana
Gazinadaspur S	Pandua	Khajuıdaha S	Dhaniakhali
Ghoshpur S	Khanakul		
Gobarara S, R	Dhaniakhali	Khamargachhi S, R	Balagarh
Khamarpara Bazar EDSO, PCO, NDDF			
Chinsura	Chinsura	Paunan S	Polba
		Pılkhana S	Khanakul
Khanpur S	Dhaniakhali	Pindira S	Pandua
Khanyan S	Pandua	Polba S	Polba
Kharu	Dhaniakhali	Pratappur PCO, NDDF Chinsura	Chinsura
Kisorepur S	Khanakul	Puinan S	Polba
Krishnabati	Balagarh	Purba Satgachhia	Balagarh
Kumarsha	Goghat	Radhaballavpur S	Goghat
Madhabpur S, R	Arambagh	Radhanagar S	Pandua
Magra	Magra	Raghubati	Goghat
Mahanad S	Pandua		
Maigram S	Arambagh	Raijamna S	Pandua
Manaspur	Chinsura		
Mandara	Dhaniakhali	Rajabazar NDDF Telenipara	Bhadreswar
Mandaran	Goghat	Rajhat S	Polba
Mankundu S	Bhadreswar	Rameswarpur S	Pandua
Mayal-Bandipur S	Khanakul	Ramnagar S	,,
Mayapur S, R	Arambagh	Ramnathpur	Polba
Meria	Polba	Ratanpur	Goghat
Milangarh S	Balagarh	Sahaganj S, R	Chinsura
Mirga-Chatra	Goghat	Salehpur S	Arambagh
Mahipalpur	Balagarh	Santipur	Goghat
Nagbal S	Dadpur	Santoshpur S	,,
Naldanga S	Chinsura	Saora	,,
Naya Sarai S, R	Balagarh	Sarada Palli S	Bhadreswar
Naopara	Singur	Satberia	Goghat
Pakri	Polba	Selampur	,,
Palasi S	Dhaniakhali	Senai	,,

Name of Post Office	Name of Thana	Name of Post Office	Name of Thana
Palpara EDSO, NDDF Chandernagore	Chandernagore	Sibpur EDSO NDDF Bansberia	Magra
Panchgara S	Pandua	Simlagarh RS	Pandua
Panchpara S, R	Balagarh	Somra S	Balagarh
Pandua PCO	Pandua	Sripur Bazar	,,
Pandugram	Goghat	Sultanpur S	Polba
Paschimpara	,,	Sugandha S	,,
Patuli S	Balagarh	Syambazar	Goghat
Talandu S	Magra	Thakuranichak S	Khanakul
Talchinan-Sanihati S	Polba	Tirol S	Arambagh
Telenipara PCO	Bhadreswar	Tilari	Goghat
Tematha EDSO, NDDF Gondalpara	Chandernagore	Tribeni	Magra

UNDER SERAMPORE HEAD OFFICE

Name of Post Office	Name of Thana	Name of Post Office	Name of Thana
Alati S	Pursura	Chechua	Dhaniakhali
Amarpur S	Khanakul	Chinamore	Arambagh
Anandanagar S	Singur	Chitrasali	Haripal
Angus PCO	Bhadreswar	Dalapatipur	,,
Atisara	Singur	Dasghara	Dhanakhali
Bachhanari	Arambagh	Deulpara	Pursura
Bahirkhanda	Haripal	Dewanbheri	Singur
Bahir Serampore EDSO, NDDF Serampore	Serampore	Dihi Ratanpur	,,
Baidyabati PCO	,,	Dattapur	Tarakeswar
		Dwarhatta S	Haripal
Baikunthapur S	Pursura	Gangadharpur Bazar	Chanditala
Bajemelia R	Singur	Ghargohal	Arambagh
Bajitpur S	Dhaniakhali	Gopinagar S,R	Dhaniakhali
Baksa S	Chanditala	Haripal PCO	Haripal
Baligari S	Tarakeswar	Jagatgori	,,
Bandipur S,R	Haripal	Jagatnagar	Singur
Bara Bahera	Uttarpara	Jalaghata	,,
Bara Tajpur	Chanditala	Jamdara S	Dhaniakhali

Name of Post Office	Name of Thana	Name of Post Office	Name of Thana
Baruipara	Singur	Janai	Chanditala
Begampur S,R	Chanditala	Jangalpara	Pursura
Belu-milki	Serampore	Jejur R	Haripal
Beraberi	Singur	Kaikala S,R	,,
Bhadrakali PCO	Uttarpara	Kalachhara	,,
Bora S,R	Arambagh	Kalbazar, NDDF Serampore	Serampore
Borai	Singur	Kamarkundu	Singur
Brahmanpara S, R	Haripal	Kanaipur S	Uttarpara
Chandanpur	,,	Karicharbheri	Singur
Chatra, NDDF Serampore	Serampore		
Keshabchak S	Tarakeswar	Nabagram	Serampore
Keshabpur S	Arambagh	Nalikul S, R	Haripal
Kharsarai S	Chanditala	Nasibpur S, R	Singur
Kinkarbati	Haripal	Nimdanga S	Dhaniakhali
Konnagar PCO	Uttarpara	Pahlanpur	Singur
Kulbatpur S	Pursura	Paniseola S, R	Haripal
Kumrul	Dhaniakhali	Pat Gopalnagar S, R	Singur
Madpur	Arambagh	Raghunathpur	Uttarpara
Mahes I PCO, NDDF Rishra	Serampore	Ramnagar S	Singur
Mahes II NDDF Rishra	,,	Rasulpur	,,
Mahisghara S	Dhaniakhali	Rathindra Avenue, EDSO, NDDF Uttarpara	Uttarpara
Makhla	Uttarpara	Rautpur S, R	Dhaniakhali
		Rishra PCO	Serampore
Malaypur S	Arambagh	Sainta	Tarakeswar
Maniktala Bazar NDDF Serampore	Serampore	Samsherpur S	,,
Manirampur S	Chanditala	Soaluk	Pursura
Mirzapur-Bankipur S	Singur	Serampore PCO	Serampore
Mohistikri S	Haripal	Sheoraphuli PCO	,,
Mollasimla	Singur	Singur	Singur
Morah S	Haripal	Tarakeswar PCO	Tarakeswar
Morepukur NDDF Rishra	Serampore	Uttarpara Bazar NDDF Uttarpara	Uttarpara

Name of Post Office	Name of Thana	Name of Post Office	Name of Thana
Muidipur	Dhaniakhali	Uttarpara PCO	,,
Musapur	Haripal		

UNDER DUAL CONTROL OF HOWRAH HEAD OFFICE (ACCOUNTS) & HOOGHLY DIVISION (ADMINISTRATION)

Name of Post Office	Name of Thana	Name of Post Office	Name of Thana
Akri Srirampur S	Pursura	Basubati	Singur
Akuni S, R	Chanditala	Basuri	Haripal
Aniya	,,	Binagram	Tarakeswar
Atpur S	Jangipara	Bhagabatipur	Chanditala
Astara	Tarakeswar	Chak-Hayatpur	Khanakul
Balarambati S, R	Singur	Chakunda	,,
Balipur	Jangipara	Chanpadanga	Tarakeswar
Balpai	Khanakul	Chanditala PCO	Chanditala
Chanrpur	Jangipara	Langulpara S	Khanakul
Childanga	Pursura	Mainan	,,
Chinra	Khanakul	Mandalika S	Jangipara
Dakshindihi S, R	Jangipara	Marakhana S	Khanakul
Dankuni S, R	Chanditala	Mashat S	Chanditala
Dharasimul	Khanakul	Moktarpur	Tarakeswar
Dihi Bhursut S	Jangipara	Mrigala	Chanditala
Dinghalbati S	,,	Naiti	,,
Furfura	,,	Narayanpur	Khanakul
Garalgachha EDSO	Chanditala	Natibpur S	,,
Ghol Digrui S	Pursura	Nawabpur	Chanditala
Ghole S	Jangipara	Palaspai S	Khanakul
Harinakhola S	Pursura	Pai Syampur S	Pursura
Haripur	Chanditala	Patul S	Khanakul
Harischak	Khanakul	Pole S	,,
Hati S	Pursura	Prasadpur	Jangipara
Hayatpur	Khanakul	Pratapnagar S	Arambagh
Helan	,,	Pursura S	Pursura
Illahipur EDSO	Chanditala	Rahimpur	Jangipara
Jagatpur	Khanakul	Rajbalhat	,,
Jangalpara Bazar S	Chanditala	Rajhati Bandar S	Khanakul
Jangipara	Jangipara	Ranbagpur	Arambagh

Name of Post Office	Name of Thana	Name of Post Office	Name of Thana
Jasar	Pursura	Ranjitbati	Khanakul
Kaiba	Khanakul	Rasidpur	Jangipara
Kedarpur	,,	Rauthkhana S	Khanakul
Khanakul	,,	Sabalsinghapur	,,
Krishnanagar	Jangipara	Saidpur	Pursura
Kristorampur	Chanditala	Sheakhala	Chanditala
Kulakas S, R	Jangipara	Sonatikri	Khanakul
Kumirmora	Chanditala	Tantisal	,,
Lakshanpur	Jangipara		

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64 Loke Nath Ghosh- The Modern History of the Indian Chiefs, Rajas, Zamindars, Native Aristocracy and Gentry. Calcutta, 1881. pp. 137-39.
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66 ibid. p. 55. In Bengal, it took no less than 44 years for all the district post offices to come under the Provincial postal system. The date of the change over in Hooghly district is not definitely known.
67 ibid. pp. 19-24.
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69 Source: Postmaster-General, West Bengal Circle.
70 Source: Postmaster-General, West Bengal Circle. The figures are correct for 1965-66.
71 Sources: (*i*) Subdivisional Information Officer. Chandernagore, (*ii*) Chairman. Serampore Municipality, and (*iii*) District Magistrate, Hooghly.
72 Source: Postmaster-General, West Bengal Circle.

CHAPTER VIII

ECONOMIC TRENDS AND MISCELLANEOUS OCCUPATIONS

LIVELIHOOD PATTERN

The Census of 1961 divides the general population of the district into two broad categories of workers and non-workers of which the former comprises the following nine livelihood classes: (I) Cultivator, (II) Agricultural labourer, (III) Mining, quarrying, forestry, fishing, hunting and activities connected with livestock, plantations, orchards and allied spheres, (IV) Household industry, (V) Manufacturing, other than household industry, (VI) Construction, (VII) Trade and commerce, (VIII) Transport, storage and communications, and (IX) Other services.

The distribution of the total population of the district, according to the above classification, is given in the table below:

COMPOSITION OF LIVELIHOOD CLASSES IN THE HOOGHLY DISTRICT

Category No.	Description	Number of		
		Persons	Males	Females
	Total No. of persons enumerated	22,31,418	11,79,267	10,52,151
I-IX	Total workers	6,81,060	6,02,519	78,541
I	Cultivators	2,06,138	1,94,831	11,307
II	Agricultural labourers	1,34,188	1,01,512	32,676
III	Mining, quarrying etc.	12,015	10,841	1,174
IV	Household industry	28,832	19,740	9,092
V	Manufacturing other than household industry	1,31,952	1,23,748	8,204
VI	Construction	12,786	12,113	673
VII	Trade & commerce	54,457	52,183	2,274
VIII	Transport, storage & communications	23,820	23,435	385
IX	Other services	76,872	64,116	12,756
	Non-workers	15,50,358	5,76,748	9,73,610

The following statement indicates the percentages of workers and non-workers belonging to the different livelihood classes, specifying their proportions under rural and urban categories:

PERCENTAGE OF WORKERS & NON-WORKERS

	Total	Livelihood Classes									Non-workers (%)
		I	II	III	IV	V	VI	VII	VIII	IX	
District Total	30.5	9.00	6.00	0.52	1.30	6.00	0.61	2.51	1.05	3.51	69.5
Rural Total	29.7	12.4	8.00	0.60	1.65	2.10	0.35	1.60	0.50	2.50	70.3
Urban Total	30.3	0.24	0.33	0.33	0.30	15.20	1.20	4.70	2.70	5.30	69.7

Another statement showing the percentages of workers under different livelihood classes to the total working force of the district is given below:

Category No.	I	II	III	IV	V	VI	VII	VIII	IX
Percentage to total workers of district	30.27	19.70	1.76	4.23	19.37	1.88	8.00	3.50	11.29

Of the total workers in the district in 1961, those engaged in the primary sector of industry comprised 51.3%, those in the secondary sector 26% and those in the tertiary sector 22.7%. The corresponding figures for the whole of West Bengal were 57.4%, 18.4% and 24.2% respectively.

Occupational classification of non-agricultural workers

The non-agricultural workers of the district are classified according to their occupations in the following table which brings out the relative importance of the various callings.

Occupational Categories	Total	Males	Females
Professional, technical and related workers	20,681	18,454	2,227
Administrative, executive and managerial workers	6,212	6,112	100
Clerical and related workers	30,124	29,876	248
Sales workers	48,546	46,257	2,289
Farmers, fishermen, hunters, loggers and related workers	11,792	10,094	1,698
Miners, quarrymen and related workers	221	220	1
Workers in transport and communication occupations	11,942	11,894	48
Craftsmen, production process workers and labourers not classified elsewhere	1,76,928	1,57,697	19,231
Service, sport and recreation workers	29,605	21,008	8,597
Workers not classified by occupation	4,683	4,564	119
Grand Total	3,40,734	3,06,176	34,558

In 1951 the number of agricultural workers in the district was 2,95,211, cultivators and share-croppers being 2,00,631 and agricultural labourers 94,580. The corresponding number in 1961 was 3,40,326 of which 2,06,138 were cultivators and 1,34,188 agricultural labourers. Thus, during the decade, 1951-61, there was an increase of 3% in the category of cultivators and 42% in that of agricultural labourers. This disproportionate growth in the ranks of agricultural labourers, as against the normal increase in the district population is very significant indeed.* In this respect the West Bengal Bargadars' Act, 1950 was found wanting inasmuch as it fell short of conferring on the share-croppers an enduring right on land.[1] This process of reduction of small cultivators and share-croppers to agricultural labourers resulted in the growth of a new landed aristocracy in the villages.

The problem of growing pressure on agricultural land with consequent increase in under-employment in this sector may be looked at from another angle. Cultivated land per agricultural worker in the district decreased from 2.16 acres in 1951 to 1.75 acres in 1961. The extent of under-employment in 1961 thus works out to about 19%, even assuming that there was no under-employment in 1951.

The percentage of workers employed in manufacturing and household industries taken together was 21.12 of the total workers in 1951 and 23.60 in 1961. But the overall proportion of workers in the district has been continually declining since 1921 when it was 42.6 per cent of the total population; it came down to 34.9 per cent in 1951 and 30.5 per cent in 1961. Contrarily, the ratio of non-workers has gone up from 57.4 per cent in 1921 to 65.1 per cent in 1951 and to 69.5 per cent in 1961. The overall fall in the number of workers and a corresponding rise in that of non-workers is an index of increased unemployment and under-employment. Numerical details of the various categories of non-working population of the district are given in the table at the next page.

General level of prices

In an under-developed economy, prices of food-grains are apt to dominate those of other commodities. Since rice forms the staple food-crop of the district, a study of its prices will reflect the trend of general level of prices. The Permanent Settlement of Land Revenue in Bengal in 1793 and the events following the passage of the Charter Acts of 1813 and 1833 greatly impaired the erstwhile self-sustained economy of this province and had their impact upon prices too.

*Though not strictly related to this district, the findings of a re-survey of the village of Kashipur in Bankura district (1956-60) are of considerable importance indicating (1) how the share-croppers were deprived of their rights conferred by the West Bengal Bargadars' Act or the Land Reforms Act, owing to (a) the absence of records of rights which were determined by verbal contracts and (b) the fear of discontinuance of their tenures if they put forth their claims, and (2) the natural process of alienation of lands from poor peasants to rich farmers. (G. C. Mandal and S. C. Sengupta—Kashipur: A Report on Re-survey of a Village. Santiniketan, 1962. p. 8).

NON-WORKING POPULATION OF HOOGHLY DISTRICT: 1961

Categories of non-working population	In Thousands					
	District total		Rural total		Urban total	
	Males	Females	Males	Females	Males	Females
Total	576.7	973.6	421.7	739.9	155.1	233.7
Full-time students or children attending schools	182.6	97.4	125.1	51.1	57.5	46.3
Persons in household duties	--	450.9	—	373.4	—	107.2
Dependents, infants & children not attending school and persons permanently disabled	346.5	407.1	273.8	33.1	72.8	74.0
Retired persons not re-employed, rentiers, persons living on agricultural or non-agricultural royalty, rent, dividend or other persons of independent means	12.6	4.5	5.5	3.2	7.1	1.4
Beggars, vagrants, independent women and others of unspecified sources of income	3.9	10.7	2.7	7.9	1.1	2.7
Inmates of panel, mental and charitable institutions	3.6	2.1	2.6	0.8	1.0	1.3
Persons seeking employment for the first time	16.0	0.6	7.3	0.05	8.8	0.6
Persons employed before but now out of employment and seeking work	11.6	0.4	4.8	0.08	6.8	0.3

During the latter half of the 19th century, such phenomena as the opening of railways, frequent failure of monsoons, heavy export, depreciation of the currency, the Burdwan fever, and lastly, stock-holding in the face of rising prices, especially during famines, exerted tremendous upward thrusts on prices. The two tables at the next page will show the extent of rise in the prices of common rice in the district during the period from 1793 to 1938.

The fall in rice prices during the decade 1929-1938 was due to the world-wide economic depression of the thirties. With the declaration of the Second World War in September 1939, prices began to rise again reaching a climax in the middle of 1943 when a famine, the severest in recent memory, had already broken out in Bengal. The rise in the price of rice was to the extent of 800 per cent over that prevailing in 1939 (namely Rs. 4-3-8 per maund at Serampore and

TABLE A[3]

Average of years	Common rice (Seers per rupee)
1793-1813 (21 yrs.)	40.00
1861-1865 (5 yrs.)	21.00
1866-1870 (,,)	20.84
1871-1875 (,,)	16.94
1876-1880 (,,)	14.40
1881-1885 (,,)	16.59
1886-1890 (,,)	14.86
1891-1895 (,,)	11.86
1896-1900 (,,)	10.95
1901-1905 (,,)	9.98
1906-1907 (2 yrs.)	7.40

TABLE B[3]

Average of years	Common rice (Seers per rupee)	
	Serampore	Arambagh
1908-1913 (6 yrs.)	8.64	9.90
1914-1918 (5 yrs.)	7.31	9.31
1919-1923 (,,)	5.64	6.56
1924-1928 (,,)	5.50	6.05
1929-1938 (10 yrs.)	10.60	11.60

Rs. 3-10-7 per maund at Arambagh) and was chiefly due to continuing inflation following upon the ceaseless stream of British purchases in India (to meet the stupendous requirements of the Allied Army) against sterling securities in the Paper Currency Reserve, drastic reduction in the supply of essential commodities. particularly food-grains,[4] loss of imports from Burma, the delay in ensuring planned movement of supplies from surplus to deficit areas, hoarding and profiteering, and "carelessness and lack of foresight of those in authority."[5]

The unprecedented situation necessitated stringent Government control over procurement and distribution of food-grains etc. besides the measures adopted in 1942.[6] District reserves of rice and paddy, equivalent to two months' offtake, were created to serve as buffer stocks for stabilizing prices.[7] Statutory rationing in rice, paddy, wheat, wheat-products, sugar etc. in 10 municipal areas and modified rationing in other deficit areas of the district came into effect from

May 1944. By the end of 1943, price of rice came down to Rs. 20-1-10 per maund at Serampore and Rs. 18-15-2 per maund at Arambagh. The harvesting of the winter crop coupled with the low price of rice at ration shops (namely Rs. 16-4-0 per maund)[8] further brought down the prices in the open market to Rs. 16-8-0 per maund at Serampore and Rs. 15-2-6 at Arambagh in 1944.[9] During the period 1944-1948, the average price of rice stood at Rs. 15-5-2 per maund at Serampore and Rs. 15-1-0 per maund at Arambagh.[10] But from the middle of 1948 rice prices started spiralling again due to severe droughts and floods, general growth in population, heavy influx of refugees from East Pakistan and severe depletion of the reserve stocks during the lean year of 1945-46.* Even the far more stringent measures adopted by Government during 1948-51† could not check the rising price-level which reached the height of Rs. 37-8-0 per maund of rice at Serampore and Rs. 26-1-0 at Arambagh in May 1952.[11] However, the special emphasis placed on agriculture in the First Five Year Plan and abundant rains began to bear fruit by the end of 1952. Consecutive good harvests warranted the withdrawal of rationing from the district in June 1954 when rice prices ruled as low as Rs. 15.50 to Rs. 17.75, Rs. 15.19 to Rs. 17.19 and Rs. 14.87 to Rs. 16.62 per maund of fine, medium and coarse varieties respectively in the different wholesale markets of the district.[12] But in the following years food-grains production registered a sharp decline. Recurring floods of 1956, 1957 and 1958, general growth in population, urbanization, and above all, the expansion of monetary demand resulting from the budgetary operations of the Central and State Governments aggravated the situation. By November 1963 prices rose to an unprecedented height, fine rice selling at Rs. 104.00, medium at Rs. 94.65 and coarse at Rs. 90.65 per quintal‡ (equivalent to Rs. 38.80, Rs. 35.32 and Rs. 33.82 per maund respectively) in the wholesale markets of the district.[13] This necessitated the re-imposition of price-control with effect from 8 January 1964, re-introduction of statutory rationing in 11 municipal areas in the industrial belt of the district from 5 January 1965 and the enforcement of various restrictive measures on the storage, movement and consumption of food-grains etc. The maximum wholesale prices per quintal of common, fine and superfine varieties of rice were fixed at Rs. 66.55, Rs. 72.35 and Rs. 78.33 and the corresponding retail prices at Rs. 69.00, Rs. 75.00 and Rs. 81.00 respectively.[14] Compulsory levy of paddy and rice at controlled prices was imposed on producers with effect from 1 December 1965.[15] The retail prices of different varieties of rice ruling at the

*Total rice production in Bengal during 1945-46 was only 38 per cent of the normal. Source: Statistical Abstract, 1951.

†cf. West Bengal Black Marketing Act of 1948 and various executive orders to prevent hoarding, enforce cordoning of surplus districts, check forward trading in foodgrains etc.

‡One quintal is equivalent to 2.68 maunds.

ration shops in September 1966 varied from 0.72 paise to Rs. 1.20 paise per kilogram.[16]

A report of the Reserve Bank of India on Currency and Banking for 1965-66 states that during the Third Plan period the price-level in the country advanced by 35.2% on top of a rise of 30% during the Second Plan.[17] The Consumer Price Index Number (General) for the industrial workers of this district rose from 100 in 1961 to 132 in 1965.[18] The following table indicating the prices of various agricultural produce during the agronomically significant months of January and August of 1956, 1961 and 1966 reflects this general trend.

WHOLESALE PRICES OF SELECTED AGRICULTURAL PRODUCE IN SOME IMPORTANT MARKETS OF HOOGHLY DISTRICT[19]

(Prices per maund in rupees)

Commodity	Market	1956		1961		1966	
		Jan.	Aug.	Jan.	Aug.	Jan.	Aug.
Paddy (fine)	Chanpadanga	9.81	13.81	12.75	13.37	*	*
Paddy (medium)	,,	9.31	13.44	11.94	13.21	*	*
Rice (fine)	Bali-Dewan-ganj	14.94	22.12	23.00	23.84	*	*
Rice (medium)	,,	14.66	21.00	22.00	23.81	*	*
Rice (coarse)	,,	14.28	20.50	21.00	22.09	*	*
Pulses (whole)							
Masur (big)	Sheoraphuli	17 12	21.00	19.00	20.00	47.85	N A.
Gram (big)	,,	12.37	13.12	19.00	19.00	46.28	N.A.
Pulses (split)							
Masur (big)	,,	23.12	21 62	22.12	19.37	48.43	41.06
Urid (big)	,,	22.25	25.50	24 12	25.00	44.41	41.06
Gram (big)	,,	15.00	16.62	20.00	19.75	47.77	46.65
Khesari (big)	,,	14.62	14.84	16.00	15.69	43.67	39.38
Potato (Rangoon)	,,	—	—	7.12	20.08	13.17	21.23
Potato (Nainital)	,,	9.94	22.47	7.62	20.67	N.A.	N.A.
Jute (Average Grade)	,,	26.87	29.06	58.50	46.06	61.81	72.50

*Prices controlled by Government.

Rural wages

Though agriculture is still the main occupation of the rural people of the district, it is not organized in the sense that industry is. In industry wages are strictly monetized, but in agriculture these are paid in cash or kind or in both depending upon the nature of the

crop, market prices and the prevailing customs. Furthermore, wages in an industrial unit are related to fixed hours of work. But in agricultural operations, these depend on working hours in varying degrees according to the type of work, the weather and other connected factors which can hardly be statutorily fixed. In course of the enquiry undertaken about agricultural labour in 1956-57, a norm of 10 hours was accepted for a working day and a labourer who worked for at least three-fourths of this period was considered to have done a full day's job.[20]

Due to the absence of modern machinery, a much larger number of persons is engaged in agriculture in simple operations like ploughing, sowing, weeding, transplanting, reaping and thrashing than would otherwise be needed. Hence, there are differences in wages paid to each of them depending upon the nature of work, its importance, and the type of person (male, female or child) employed While men are engaged for all agricultural operations, the services of women and children are mostly requisitioned for transplanting and harvesting.

Because of its casual nature, agricultural employment shows higher seasonal fluctuations reducing wages to a very low level. In 1845 the daily wage of a reaper or other daylabourer in the Hooghly district was as low as Re. 0-1-3. It rose to Re. 0-1-6 in 1854, Re. 0-1-10½ in 1859, Re. 0-2-0 in 1864, Re. 0-2-6 in 1872 and Re. 0-4-2 to Re. 0-5-0 in 1912.[21] In 1959, the State Government for the first time fixed minimum agricultural wages in terms of the Minimum Wages Act of 1949, the rates being Rs. 1.50 to 1.87 for males, Rs. 1.37 to 1.75 for females and Re. 0.87 to Rs. 1.82 for children.[22] The average daily earnings of agricultural labourers rose considerably during the decade 1956-65, as will be evident from the table below,[23] yet they are deplorably lower than those of unskilled labourers in non-agricultural sectors.

Year	Normal daily working hours	Field labourers (Rs. per day)			Other agricultural labourers (Rs. per day)			Herdsmen (Rs. per animal per month)		
		Man	Woman	Child	Man	Woman	Child	Man	Woman	Child
1956	8	1.67	1.42	1.00	2.28	1.25	–	1.71	1.41	0.94
1965	8	2.60	2.10	1.68	2.51	2.00	1.47	2.06	1.62	1.31

The present wage rate varies between Rs. 1.75 and Rs. 4.00 per day, according to season.[24] Attached workers, engaged primarily as farm hands, are also required to do household duties. Their annual wage averages Rs. 300 besides breakfast, major meals and clothing.

Payment of wages exclusively in kind is not much in vogue and detailed information on this point is also lacking. The wages paid under the Rural Manpower Programme (valid for 1966) in this

district as compared with the P.W.D. scheduled rates for similar type of work are given below.[25]

Category of workers	Daily wages (in Rs.) under R.M. Programme		P.W.D. scheduled rates (in Rs.) for similar type of work	
	Male	Female	Male	Female
Unskilled	2.00	2.00	2.00	2.00
Skilled labour for brick manufacture	3.00	3.00	4.50	4.50

Urban wages

The minimum wages payable to industrial workers in the district are now statutorily regulated either by arbitration awards, as in the case of jute and cotton textile establishments, or by the Minimum Wages Act of 1948, as in the case of rice mills, oil mills, flour mills, public motor transport, tobacco (*biḍi* and cigarette) manufactories etc. As the wages thus fixed do not vary much from district to district, it would be of interest to compare the wage-structures obtaining in certain representative industries of the district setting a standard to the wage-structures in other industries as well. The wages (shown below) in the silk printing industry are valid for 1961, those in the Presidency Jute Mills, Hindusthan Motors Ltd. and Tribeni Tissues Ltd. for 1966 and those in the Alkali & Chemical Corporation of India Ltd. for a period of 5 years from 3 August 1966.

A. Silk Printing Industry (located chiefly in Serampore).[26]

	Wages per day (in Rs.)	
Skilled	Minimum	Maximum
Printer	1.50	5.00
Block-maker	1.50	4.17
Dyer	1.00	3.00
Finisher	2.17	2.50
Semi-skilled		
Washer	1.33	2.66
Steamer	1.50	2.00
Unskilled		
Steaming coolie	1.00	2.00
General coolie	1.00	2.00

B. Presidency Jute Mills, Rishra.

Categories	Monthly wages (in Rs.) including allowances	
	Minimum	Maximum
Unskilled	107.00	108.00
Semi-skilled	108.00	216.00
Skilled	119.00	220.00
Clerical	135.00	380.00
Others	107.00	264.00

C. Hindusthan Motors Ltd., Uttarpara.

Categories	Consolidated pay per month (in Rs.)	
	Minimum	Maximum
Supervisory	750.00	—
Others	300.00	800.00
Clerical	200.00	400.00
Skilled	201.00	300.00
Unskilled	115.00	150.00

D. Tribeni Tissues Ltd., Tribeni.

Categories	Consolidated monthly pay (in Rs.)	
	Minimum	Maximum
Skilled	270.00	425.00
Unskilled	225.00	—

E. Alkali & Chemical Corporation of India Ltd., Rishra.

Categories	Time-scale of monthly basic pay (in Rs.)	
	Minimum	Maximum
Office		
'D' Grade	75.00	272.00
'C' ,,	115.00	355.00
'B' ,,	155.00	422.00
Stenographer	105.00	354.00

E. Alkali & Chemical Corporation of India Ltd., Rishra.—(*contd.*).

Categories	Time-scale of monthly basic pay (in Rs.) Minimum	Maximum
Plant		
'D' Grade	85.00	305.00
'C' ,,	130.00	392.00
'B' ,,	175.00	463.00
Stenographer	120.00	393.00
Technical Supervisor	130.00	392.00
Laboratory Assistant		
'C' Grade	130.00	392.00
'D' ,,	85.00	305.00
Service Staff		
Sweeper & 'Mali'	61.00	91.00
Canteen Boy, Peon & Lorry Khalasi	63.00	96.50
Head Peon, Cook, 'Moira' & Durwan	70.00	111.00
'Jamadar'	83.00	135.00
Driver	110.00	179.00

Standard of living

The spiralling of prices after 1956 resulted in the progressive rise in the general cost of living for all expenditure groups, as will be evident from the following table which will also establish that the cost of living index followed very closely the index for food articles, the latter being mainly responsible for raising the former because of its greater importance in the domestic sphere.

COST OF LIVING INDEX NUMBER[17]
(Base: November 1950=100)
Monthly averages
EXPENDITURE LEVEL

Items of consumption	Year	Re. 1-Rs. 100	Rs. 101-Rs. 200	Rs. 201-Rs. 350	Rs. 351-Rs. 700	Rs. 701 and above
		Centre : Chinsura				
Food	1954	93.1	92.8	95.1	96.2	94.8
	55	88.4	90.0	90.7	92.1	94.8
	56	96.4	96.4	95.9	95.9	95.1
	57	108.0	106.8	105.0	103.8	103.4
	58	112.3	110.7	108.4	106.7	106.4

COST OF LIVING INDEX NUMBER—*Contd.*

Items of consumption	Year	Re. 1-Rs. 100	Rs. 101-Rs. 200	Rs. 201 Rs. 350	Rs. 351-Rs. 700	Rs. 701 and above
		Centre: Chinsura—*Contd.*				
Food	1959	111.3	110.3	108.8	107.1	107.2
	60	114.8	115.3	114.3	113.4	112.6
	61	112.5	113.7	114.1	114.4	113.4
	62	120 7	123.3	120.8	120.3	119.8
	63	134 8	133.0	130.3	127.8	127.9
	64	135.2	135.3	134.5	133.0	133.2
	65	146.8	146.7	146.1	145.1	145.6
All combined	1954	95.7	97.3	98.3	99.5	99.3
	55	93.2	95.0	96.2	98.4	98.2
	56	99.1	99.2	99.4	99.5	99.5
	57	108.2	107.1	105.8	104.2	104.3
	58	112 3	111.1	109.7	109.1	108.8
	59	111.6	110.8	109.7	108.5	108.6
	60	114.5	114.6	113.7	112.1	111.9
	61	113.8	114.7	113.7	113.4	113.8
	62	121.2	121.3	114.7	116.2	119.1
	63	131.4	129.5	120.4	122.3	123.9
	64	132.6	131.9	129.8	125.3	127.1
	65	141.8	140.7	138.0	133.3	135.0
		Centre : Serampore				
Food	1954	94 9	95.7	96.7	95 5	95.4
	55	89.5	90.0	90.9	89.5	90.4
	56	96.7	96.4	96.4	94.5	95.6
	57	103.2	103.4	103.4	100.0	102.0
	58	109.9	109.7	109.2	104 9	108.0
	59	109.4	109.6	109.1	106 0	108.1
	60	111.3	111.7	111.5	107 7	110.3
	61	111.8	112.6	112 9	111.7	112.1
	62	119.2	120.2	120.5	117.6	120.1
	63	127.3	128.0	127.6	122.6	127.2
	64	134.0	134.9	135.0	132.5	134.6
	65	146.1	148.1	149.3	146.8	149.8

COST OF LIVING INDEX NUMBER—*Contd.*

Items of consumption	Year	Re. 1-Rs. 100	Rs. 101-Rs. 200	Rs. 201-Rs. 350	Rs. 351-Rs. 700	Rs. 701 and above
		Centre: Serampore—*Contd.*				
All combined	1954	97.0	98.5	100.2	99.1	100.0
	55	93.4	95.1	97.1	96.0	97.6
	56	98.4	99.1	100.2	98.4	99.0
	57	103.4	103.8	104.5	101.7	102.2
	58	109.4	109.3	110.0	106.8	108.4
	59	109 4	109.3	109.8	107.1	108.2
	60	111.1	111.3	112.0	109.1	110.2
	61	112.0	112.5	113.3	111.2	111.4
	62	118.0	118.0	118.3	115.4	115.8
	63	124.3	123.7	123.3	118.9	119.8
	64	129.6	128.6	128.2	124.9	124.0
	65	139.8	138.6	138.5	134.5	133.6

An idea of the standard of living of the rural people of the district obtaining in 1962 may be had from the two survey reports[28] on Kodalia, a village in the Chinsura thana just on the outskirts of the Hooghly-Chinsura municipal area, and on Ghatampur, another village further in the interior of the district on the western boundary of the Polba police station. Of the 182 households surveyed in Kodalia, 16 or 8.8% were fairly solvent; 47 or 25.8% were on the side of solvency; 41 or 22.5% lived on the verge of poverty and 78 or 42.9% were very poor. 65.4% of the total population of this village was under-nourished and 99 families or 54.4% of the total were in debts. Only 53 households had non-thatched houses and the members of 130 families slept on the floor or on *chārpoys*. 78 families (42.9%) did not have the means to procure lanterns and used uncovered kerosene lamps. While 38 households (20.9%) possessed one or more of furniture like bedsteads, chairs, tables or mirrors, the number of those possessing any two of luxury articles like stoves, cycles, radios and gramophones was only 27 (14.8%). In Ghatampur 6% of the families were well-off, 9.3% were nearly well-off, 63.4% were poor and 21.3% were neither poor nor rich. 98 families out of a total of 150 (65.3%) were under-nourished. In 93 households people slept on the ground and only 14 families (9.3%) lived in better-type houses and 3 families (2%) had radios.

Articles of consumption

The common articles of consumption in Kodalia consisted of rice which formed the staple diet in most of the families, while rice with wheat or wheat alone was consumed in a very few families. The more affluent sections also took pulses, vegetable curry, fish, egg, meat, milk and ghee, in combinations of two, three or more while the poor

supplemented their basic diet of rice with vegetables (*sāk*) and *googli*, a kind of oyster collected from village ponds. Tea was drunk almost universally. The people of both the villages are accustomed, in varying degrees, to urban ways of life like drinking tea or using coal as fuel for cooking.

No such survey report on the standard of living and articles of consumption of the urban people of this district is available. But, as may be expected, an average urban dweller has a higher standard of living than his rural counterpart.

Family budgets

It is not possible to give an idea of the family budgets of the well-to-do, the middle and the lower income groups throughout the district as sufficient information is lacking. But the following tables (at pages 407-8), prepared by the State Statistical Bureau, West Bengal, and giving monthly expenditure figures on various counts at Serampore and Chinsura, will indicate the trend of family budgets of different income groups during the period 1950-51 to 1960-61.

General level of employment

A fair idea about the general level of employment in the district has already been given at the beginning of this chapter. There exists considerable unemployment (especially during the agricultural off-season) and under-employment in the rural areas as may be inferred from the fact that as many as 18,885 persons were seeking work within the Pursura Stage II Development Block alone in 1963 according to the report of the local B.D.O. Besides providing employment

PERCENTAGE EXPENDITURE ON DIFFERENT GROUPS OF ITEMS OF CONSUMPTION BY DIFFERENT EXPENDITURE LEVELS

Centre : Serampore

Groups of items of consumption	Average of years	Monthly expenditure levels (in Rs.)				
		1-100	101-200	201-350	351-700	701 and above
Food	1950-51	66.96	60.49	56.10	51.17	38.96
	1955-56	63.05	61.56	55.23	47.23	39.12
	1960-61	67.82	65.54	53.06	51.66	48.59
Clothing	1950-51	6.19	6.47	5.63	6.63	4.77
	1955-56	7.51	8.41	9.25	7.91	7.80
	1960 61	7.28	7.67	6.30	6.89	8.54
Fuel & Light	1950-51	7.33	6.45	5.38	3.80	3.73
	1955-56	7.16	6.25	4.61	4.62	3.70
	1960-61	5.92	5.19	4.71	3.62	4.25
Housing	1950-51	3.48	4.22	3.29	6 49	5.70
	1955-56	5.93	4.28	7.70	7.75	7.30
	1960-61	5.87	4.67	7.90	7.23	7.06
Miscellaneous	1950-51	16.04	22.37	29.60	31.91	46.84
	1955-56	16.35	19.50	23.21	32.49	42.08
	1960-61	13.11	16.93	28.03	30.60	31.56
Total	1950-51	100.00	100.00	100.00	100.00	100.00
	1955-56	100.00	100.00	100.00	100.00	100.00
	1960-61	100.00	100.00	100.00	100.00	100.00

Centre : Chinsura

Groups of items of consumption	Average of years	Monthly expenditure levels (in Rs.)				
		1-100	101-200	201-350	351-700	701 and above
Food	1950-51	67.07	62.85	56.29	42.62	38.96
	1955-56	63.10	60.87	50.15	47.23	39.12
	1960-61	67.66	65.84	58.01	55.75	52.84
Clothing	1950-51	6.44	6.50	6.86	4.94	4.77
	1955-56	8.58	8.13	8.47	7.91	7.80
	1960-61	7.41	7.60	8.55	8.75	9.87
Fuel & Light	1950-51	8.48	5.48	4.88	3.57	3.73
	1955-56	6.56	5.41	4.08	4.62	3.70
	1960-61	6.82	5.21	5.05	4.87	3.91
Housing	1950-51	3.98	3.02	3.11	5.68	5.70
	1955-56	4.58	4.95	4.66	7.75	7.30
	1960-61	4.78	3.19	4.61	3.49	1.32
Miscellaneous	1950-51	14.03	22.15	28.86	43.19	46.84
	1955-56	17.18	20.64	32.64	32.49	42.08
	1960-61	13.33	18.16	23.78	27.14	32.06
Total	1950-51	100.00	100.00	100.00	100.00	100.00
	1955-56	100.00	100.00	100.00	100.00	100.00
	1960-61	100.00	100.00	100.00	100.00	100.00

through Test Relief works,* the State Government introduced the Rural Manpower Programme in Goghat Block in 1961 and in Pursura Block in 1963 with a view to creating employment and augmenting agricultural production. The latter Block alone is estimated to provide work for 74,433 man-days during the duration of the project.[29]

Hooghly's diversified industries, namely jute, textiles, rubber products, automobiles, heavy chemicals, rice mills etc. located chiefly in the region stretching from Uttarpara to Tribeni, provide employment to tens of thousands of workers daily. In 1964, the average daily attendance in all such industries was 83,409.[30]

Supply of labour

To ensure an easy flow of technical, professional and skilled personnel to the local employment market, educational and training facilities exist in different technical and vocational institutions of the district of which mention may be made of the College of Textile Technology at Serampore, the Hooghly Institute of Technology at Hooghly and the Serampore Motor and Electric Engineering School at Serampore. Unskilled labourers come from within the State as also from without—Bihar, U.P. and Orissa being the chief supplying zones.

Occupational shifts

The occupational shifts experienced in the district over the last

*Total expenditure in 1961 on Gratuitous Relief and Test Relief was Rs. 2,44,513 plus 14,346 mds. of wheat and 1,510 mds. of rice (excluding food-grains figures for Arambagh). In 1965, the total disbursements rose to Rs. 10,20,128 plus 5,455 mds. of wheat.

four decades are shown in the following table[31] which gives the distribution of workers according to different categories and their percentages (shown within brackets) for the years 1921, 1931, 1951 and 1961.

Category of workers	1921	1931	1951	1961
Total workers	4,71,104 (100.00)	4,84.116 (100.00)	5,60,698 (100.00)	6,81,060 (100.00)
Cultivators	1,54,991 (32.90)	1,19,033 (24.59)	2,00,631 (35.78)	2,06,138 (30.27)
Agricultural labourers	93,959 (19.95)	1,19,516 (24.69)	94,580 (16.87)	1,34,188 (19.70)
Mining. quarrying, livestock, forestry, fishing, hunting etc.	9,007 (1.91)	7,901 (1.63)	4,969 (0.89)	12,015 (1.76)
Manufacturing including household industry	1,19,862 (25.44)	92,424 (19.09)	1,18,448 (21.12)	1,60,784 (23.60)
Construction	6,929 (1.47)	7,358 (1.52)	7,382 (1.32)	12,786 (1.88)
Trade & commerce	28,988 (6.15)	26,266 (5.43)	47,768 (8.52)	54,457 (8.00)
Transport, storage & communications	7,147 (1.52)	6,005 (1.24)	16,826 (3.00)	23,820 (3.50)
Other services	50,221 (10.66)	1,05,613 (21.81)	70,094 (12.50)	76,872 (11.29)

Employment Exchanges

The District Employment Exchange started functioning at Serampore in November 1952 and exercised jurisdiction over the entire district till March 1962. A separate Employment Exchange, called the Project Employment Exchange, with exclusive jurisdiction over the Sadar subdivision was opened at Bandel in April 1962.

The following table covering both the Exchanges and showing figures of registrations, placements, vacancies notified, live register at the close of each year and monthly average number of employers using the Exchanges during 1965 will convey an idea of the magnitude of unemployment in the district and the efforts of these two units to relieve it.

DISTRICT EMPLOYMENT EXCHANGE : SERAMPORE

Year	No. of registrations	No. of placements	Vacancies notified	Live Register at the end of December	Monthly average No. of employers using the Exchange
1965	10,884	732	1,932	13,619	19
PROJECT EMPLOYMENT EXCHANGE : BANDEL					
1965	5,777	265	589	9,834	3

As registration is not maintained according to the categories of employment sought for or procured, it is not possible to indicate the occupational pattern of the job-seekers.

The Serampore Exchange is experiencing shortage of teachers (Hons. graduates), fast and accurate stenographers, experienced time-keepers, weavers (power-loom), jobbers, dye makers, fitters (jig & fixtures), structural and sheet-metal workers, drillers, winders, markers, textile technologists, turbine operators, crane drivers, millers, nurses and other skilled personnel; while its Bandel counterpart of chemists, electric supervisors, trained High School teachers, trained librarians, fork-lift truck drivers, boiler attendants etc. Both the centres report excess supply of unskilled workers and freshers from schools and colleges.

To relieve congestion in crowded occupations, the Exchanges keep the registrants posted through group discussions about the salient features of the overall employment market and also advise them to equip themselves for absorption in new occupations. With the same object they review the old cases from time to time, arrange for career talks in schools, provide vocational guidance to candidates and assist in the placement of youths in training centres, apprenticeships in jobs etc.

The District Employment Advisory Committee, consisting of representatives of the people and the Government, reviews the work of the Exchanges from time to time, assesses the employment and unemployment trends, both urban and rural, and suggests measures for expanding employment opportunities.

LEARNED PROFESSIONS

Teachers

In 1963-64 there were 13,313 teachers in the district of whom 11,270 were men and 2,043 women. 585 (including 45 women) were employed in colleges (general and professional), 12,005 (including 1,919 women) in Higher Secondary, High, Junior High, Senior Basic, Primary and Junior Basic schools, 216 (including 12 women) in professional schools and 507 (including 67 women) in special educational institutions like *tols*, *madrasahs* etc. The teachers have their respective associations for safeguarding and promoting their interests. The problems connected with collegiate education chiefly relate to the lack of uniform pay-scales and a common code governing service conditions. Elevation of the standard of higher education is another desideratum.[32] The drawbacks besetting secondary education are (*i*) frequent change of school or of profession by teachers in urban areas, especially of the science and technical streams, due to economic reasons and lack of residential facilities, and (*ii*) dearth of qualified teachers in rural areas owing to environmental difficulties and irregular payment of salaries.[33]

Doctors

In 1961 there were 1,770 doctors in the district of whom 1,738

were men and 32 women. Allopathic physicians and surgeons numbered 537 (including 22 women), Homoeopathic physicians 551 (including 2 women) and other unclassified physicians 682. Most of the allopaths are enrolled as members of the West Bengal Branch of the Indian Medical Association which has units in the district. Of the 537 allopaths, 407 practised in urban areas and 130 in the countryside. Similarly, out of the 551 homoeopaths, 174 were in urban and 377 in rural areas. These figures clearly indicate the preponderance of allopaths in the towns and of homoeopaths in the villages.

Engineers

Hooghly being one of the most important industrial districts of West Bengal absorbs a large number of engineers of all descriptions. In 1961 there were 1,027 (including 7 women) engineers, architects and surveyors in the district of whom 399 (including 1 woman) were civil engineers or overseers. A number of associations like the Institution of Engineers (India) looks after the interests of the profession.

According to the 1961 Census, there were 639 writers, artists, musicians and related workers (including 20 women) in the district of whom 483 (including 16 women) lived in towns and the rest in villages.

DOMESTIC AND PERSONAL SERVICES

According to the Census of 1961 the total number of persons engaged in the district as housekeepers, cooks, domestic servants, maids etc. was 14,824 of whom 7,469 were females. In these days of high cost of living, it is difficult for most middle and lower middle class people to engage wholetime servants. Subject to means, people of these groups, therefore, usually remain content with employing maid-servants on a part-time basis, their wages, in the second half of 1966, ranging between Rs. 8 and Rs. 10 per month without food, but with such perquisites as a piece of sari on the occasion of the Durga Puja festival.[84] It is the higher income groups which can afford to have wholetime servants or cooks, the latter being mostly women. Male servants prefer to work in various establishments as butlers, cooks, bearers, waiters and the like which accounts for the numerical preponderance of maid-servants in households. The female servant-cum-cook's wage is usually Rs. 20 per month besides food and clothing.[85] The wage of a male servant varies from Rs. 15 to Rs. 30 per month with boarding.[86]

Domestic service

Barbers

The barber has had an important place in Hindu society because of the services rendered by him in connexion with religious ceremonies and rituals like *upanayan*, marriage, *srādh* and the like. But the traditional ties that once bound him with the rest of the community are fast loosening and the relationship is becoming more and more formal. During the Census of 1961, 2,048 barbers were

enumerated in the district of whom 37 were women. Their charges vary from rural to urban areas as also from pavements to hair-cutting 'saloons'. In the second half of 1966, a pavement barber charged from 10 to 12 paise for a shave and from 37 to 50 paise for a hair-cut, the corresponding rates in 'saloons' being 15 to 20 and 50 to 62 paise respectively. The barbers employed in 'saloons' receive monthly salaries ranging between Rs. 30 and Rs. 60 besides principal meals depending upon their efficiency and experience.[37] There is a registered Barbers' Association in Chandernagore subdivision.

Tailors

The Census of 1961 put the total number of tailors, cutters, furriers and related workers in the district at 5,243 of whom 1,056 were women. Though they are spread all over the district, they are mostly to be found in the urban areas. In the villages tailoring is a simple art and is confined to making shirts, *punjābis*, *kurtās* and pyjamas. It is in the urban areas that tailoring has become a specialized art catering for modern fashions of both sexes. Tailoring charges differ according to the quality of the materials as of the work. But the prevailing rates for making a half-shirt is Rs. 1.25, a full-shirt or a *punjābi* Rs. 1.50, a cotton trousers Rs. 3 to Rs. 4 and a woman's blouse 88 paise. The wage of a tailor employed in an establishment is usually Rs. 60 per month besides two principal meals a day. When they are employed on commission basis, the remuneration is one-third of the price of each piece of work.[38] There is no tailors' association in the district.

Washermen

In the 1961 Census, 1,802 persons in the district were enumerated as launderers, cleaners, pressers, washermen, dhobies etc. of whom 359 were women. Their usual charges for washing dhotis, saris, shirts and *punjābis* were 19 to 22 paise per piece, coloured sari 50 paise per piece, silk clothings Rs. 1.75 to Rs. 3 per piece, trousers (ordinary) 22 to 25 paise per piece and warm clothings Rs. 2.00 to Rs. 3.50 per piece. Double the above rates are usually charged for all urgent washing. For bulk washing the charge is Rs. 14 to Rs. 20 per 100 articles.[39]

Carpenters, masons etc.

There were 4,979 carpenters and allied workers in the district in 1961. The wage of a carpenter is usually Rs. 5 to Rs. 6 per day. Bricklayers, plasterers, masons numbered 4,817 (including 73 females) in 1961. The daily wage of a mason varies between Rs. 4 and Rs. 6.[40]

COMMUNITY DEVELOPMENT

Within the framework of the Five Year Plans, the Community Development Programme aiming at ameliorating the socio-economic condition of the rural people was first launched in Hooghly district in 1954 with the inauguration of the Arambagh, Khanakul and Pursura development blocks. The Programme now covers the whole district with 17 blocks, the particulars of which are given in the table below.

Name of Sub-division	Name of Block	Date of inaugura-tion	Present stage
Sadar	Chinsura-Magra	1.8.62	Stage I
	Polba-Dadpur	2.10.55	,, II
	Dhaniakhali	2.10.56	,, ,,
	Balagarh	2.10.56	,, ,,
	Pandua	1.1.62	,, ,,
Chandernagore	Singur	2.10.56	Stage II
	Haripal	1.4.61	,, ,,
	Tarakeswar	1.10.64	,, ,,
Serampore	Serampore-Uttarpara	1.8.62	,, I
	Chanditala-I	1.10.59	,, ,,
	Chanditala-II	1.10.59	,, ,,
	Jangipara	1.4.57	,, II
Arambagh	Arambagh	2.10.54	Post-Stage II
	Khanakul-I	2.10.54	,,
	Khanakul-II	1.10.60	,,
	Pursura	2.10.54	,,
	Goghat	1.4.59	Stage I

Other important details relating to these blocks are given in the following table.

Name of Block	Area in sq. km.	Area in sq. miles	No. of villages	Total population
Chinsura-Magra	102.3	39.5	75	62,380
Polba-Dadpur	285.7	110.3	194	1,14,461
Dhaniakhali	275.1	106.2	214	1,37,151
Balagarh	205.9	79.5	136	97,148
Pandua	286.5	110.6	158	1,15,223
Singur	147 4	56.9	101	1,28,073
Haripal	184.4	71 2	—	1,11,773
Tarakeswar	119.9	46.3	90	85,211
Serampore-Uttarpara	87.0	33 6	25	44,486
Chanditala-I	89.0	34.38	56	81,046
Chanditala-II	77.0	29.72	46	85,491
Jangipara	163.9	63.3	129	96,881
Arambagh	297.9	115.0	158	1,16,285
Khanakul-I	172.2	66.5	94	97,781
Khanakul-II	121.5	46.9	53	79,349
Pursura	100.5	38.8	50	73,939
Goghat	376.3	145.3	211	1,24,527

ACTUAL EXPENDITURE (IN RS.) INCURRED DURING 1966-67 AND 1967-68 IN A FEW SCHEMES UNDER THE SCHEMATIC BUDGET OF THE COMMUNITY DEVELOPMENT DEPARTMENT

	Year	Name of Block											
		Polba-Dadpur	Jangi-para	Dhania-khali	Bala-garh	Singur	Chandi-tala—I	Chandi-tala—II	Haripal	Tarak-eswar	Seram-pore—Uttar-para	Pandua	Chin-sura—Magra
Result demonstration	1966-67	—	—	—	—	—	802	460	500	301	500	400	500
	1967-68	—	—	—	—	—	272	300	—	268	300	400	320
Small workshop	1966-67	—	—	—	—	—	6,010	2,108	1,930	1.703	1,200	3,800	1,092
	1967-68	—	—	—	—	—	1,457	2,330	1,998	3,624	1,500	4,911	2,136
Improved poultry	1966-67	—	—	—	—	—	—	—	130	750	1,030	620	975
	1967-68	—	—	—	—	—	—	—	—	500	300	600	300
Misc. Agri. Schemes	1966-67	4,500	3,200	2,623	3,800	2,000	6,590	5,873	3,000	3,876	3,000	3,000	2,000
	1967-68	5,000	5,000	2,999	3,000	4,000	5,000	4,950	4,400	6,908	3,000	2,200	3,888
Irrigation	1966-67	10,000	7,000	6,560	10,000	5,000	28,900	14,000	21,000	6,000	8,000	8,000	8,000
	1967-68	5,800	3,000	5,000	5,000	4,000	12,500	7,500	3,000	5,000	6,000	5,000	4,000
Reclamation of waste land	1966-67	—	5,000	5,000	4,000	2,400	8,000	6,600	13,000	—	5,000	5,000	—
	1967-68	—	—	—	—	—	—	4,200	—	—	—	—	420
Productive scheme for agriculture	1966-67	1,000	1,000	2,000	1,000	960	5,000	2,000	7,000	3,000	2,000	3,000	2,000
	1967-68	1,000	1,000	1,000	1,000	1,000	1,500	1,500	—	1,000	1,000	1,000	1,000

ACTUAL EXPENDITURE (IN RS.) INCURRED DURING 1966-67 AND 1967-68 IN A FEW SCHEMES UNDER THE SCHEMATIC BUDGET OF THE COMMUNITY DEVELOPMENT DEPARTMENT—*Contd.*

	Year	Name of Block											
		Polba-Dadpur	Jangi-para	Dhania-khali	Bala-garh	Singur	Chandi-tala—I	Chandi-tala—II	Haripal	Tarak-eswar	Seram-pore—Uttar-para	Pandua	Chin-sura—Magra
Productive scheme for animal husbandry	1966-67	500	—	500	500	1,500	2,360	2,500	2,000	—	500	—	1,000
	1967-68	1,500	1,500	860	1,500	1,500	140	1,500	—	1,300	1,000	860	1,500
Improvement of schools	1966-67	—	—	8,450	—	—	5,510	500	—	—	1,500	1,500	1,500
	1967-68	—	—	1,500	—	—	1,520	1,500	1,500	1,500	1,000	1,500	4,000
Social education centres	1966-67	—	—	1,000	—	1,000	1,000	1,000	789	1,500	1,000	1,000	1,000
	1967-68	—	—	1,758	—	—	2,000	2,000	2,300	3,000	1,000	1,758	2,000
Recreational activities & prizes	1966-67	—	—	500	—	400	960	500	—	420	500	500	500
	1967-68	—	—	900	—	—	2,000	1,000	2,400	1,000	2,000	900	1,000
Cutcha roads	1966-67	—	—	—	—	—	5,604	3,810	321	—	2,000	2,000	2,200
	1967-68	10,000	3,000	7,478	2,000	3,000	13,000	4,000	2,230	7,400	3,000	7,478	2,000
Training-cum-production centres	1966-67	—	4,000	—	—	—	9,168	11,200	11,559	—	—	—	6,133
	1967-68	—	4,500	—	—	2,500	10,582	8,874	11,046	—	2,500	—	2,728

N.B. No expenditure was incurred in the Arambagh, Khanakul (I & II) and Pursura Blocks during the two years under review as there was no provision for the same in the Community Development Schematic Budget. In the Goghat Block, Rs. 740 was spent in 1966-67 for Result Demonstration, Rs. 1,500 in 1967-68 for Miscellaneous Agricultural Schemes, Rs. 3,146 in 1966-67 and Rs. 4,000 in 1967-68 for Training-cum-Production Centres.

Source: Assistant Development Commissioner, West Bengal.

As the executive head of block administration, the Block Development Officer is the drawing and disbursing officer in respect of most of the schemes sanctioned under the Community Development Budget. He also supervises the activities of Extension Officers who are block-level specialists responsible for the implementation of schemes of their respective parent departments. Normally, there are 8 Extension Officers in a block, one each for agriculture, animal husbandry, rural engineering, social education, programme for women and children, co-operation, rural industries and panchayats. There is also a number of village-level workers, the Gram Sevaks and Gram Sevikas, to carry developmental activities to the remotest corners of the district. The block administration is now closely linked up with the Anchalik Parishads and the B.D.O. is the *ex-officio* Chief Executive Officer of the Anchalik Parishad and the Inspector of Panchayats within his jurisdiction.

Some of the schemes implemented at the block-level are exclusively financed from the State exchequer while in others, people's participation through contribution of funds or voluntary labour is a pre-condition. The actual expenditure incurred in the various blocks of the district during 1967-68 for implementing different welfare schemes are shown in the table at pages 414-15 ante.

NOTES

1 Census 1951, Vol. VI, Part IA—Report. p. 495.

2 L. S. S. O'Malley and Monmohan Chakravarty—Bengal District Gazetteers: Hooghly. Calcutta, 1912. p. 171.

3 Source: Board of Revenue, Bengal.

4 R. C. Majumdar, H. C. Raychaudhuri and K. K. Dutta—An Advanced History of India. London, 1953. p. 875.

5 loc. cit.

6 Cf. Bengal Foodgrains Control Order, 1942.

7 Manual of Distribution of Civil Supplies in Districts (Part I). p. 42.

8 The Calcutta Gazette dated 22.6.44.

9 Source: Board of Revenue, Bengal.

10 Source: Board of Revenue, Bengal and Board of Revenue, West Bengal.

11 Source: Board of Revenue, West Bengal.

12 Source: Directorate of Agricultural Marketing, Government of West Bengal.

13 -ditto-

14 Calcutta Gazette, Extraordinary, dated 29.12.64.

15 Calcutta Gazette, dated 27.11.65.

16 Source: Deputy Controller of Rationing, Serampore. (1 quintal is equal to 100 kilograms)

17 The Statesman, Calcutta Edition, dated 15.9.66.

18 Source: Labour Bureau, Government of India.

19 Source: Directorate of Agricultural Marketing, West Bengal.

20 Labour Gazette, December 1961. p. 635.

21 L. S. S. O'Malley and Monmohan Chakravarti—op. cit. p. 168.

22 Labour Gazette, Calcutta, February 1960. p. 162.

23 Source: Agriculture and Community Development Department, Govt. of West Bengal.

24 Source: District Magistrate, Hooghly.

25 Source: Agriculture and C. D. Department, Govt. of West Bengal.

26 Report on an Enquiry into employment, earnings and amenities in the Silk Printing Industry in West Bengal: Labour Gazette, May 1961. p. 547.

27 Source: State Statistical Bureau, West Bengal.

28 J. C. Sengupta—Census of India 1961, Vol. XVI, Part VI: Village Survey Monographs No. 1 & 3 on Kodalia and Ghatampur villages respectively. Calcutta, 1962.

29 Source: Agriculture & Community Development Dept., Govt. of West Bengal.

30 Source: Chief Inspectorate of Factories, West Bengal.

31 B. Ray—Census 1961: District Census Handbook: Hooghly. Calcutta, 1965. p. ci.

32 Source: West Bengal College and University Teachers' Association.

33 Source: West Bengal Head Masters' Association.

34-40 Source: District Magistrate, Hooghly.

CHAPTER IX

GENERAL ADMINISTRATION

THE STATE GOVERNMENT SET-UP

"Milton was once impelled by national pride to say that when God wishes to have some hard thing done, he sends for His Englishman. In India it may more truly be said that when the Government wants a hard bit of work done, it calls on the District Officer. . . . He has not only to discharge the everyday duties of administration (many of them dull, petty and uninteresting), but also to cope with sudden emergencies of extraordinary diversity."[1]

The District Magistrate

The District Magistrate and Collector of Hooghly (or, for that matter, of any other district in West Bengal) is the principal agent of the Government on the spot maintaining a prompt, reliable and abiding link with the latter. As the pivot of general administration in the district, he is in overall charge of the local administration both in its revenue and executive spheres. As Collector, he is the head of the revenue administration in the district and is responsible to the Government through the Board of Revenue. The collection of land revenue and the maintenance of land records and diverse related statistics are some of his important functions which he discharges through the hierarchy of revenue officials working under him. The hearing of appeals against the decisions of subordinate revenue officers also forms a part of his duties. As regards excise administration, he is the controlling authority but the day-to-day work is carried on by a Superintendent of Excise with the help of staff placed under him. In the capacity of the District Magistrate, his primary duty is to maintain law and order within his jurisdiction for which the district police force, under the immediate control of a Superintendent of Police, takes orders from him. He is also the controlling authority in respect of the staff engaged in prosecuting criminal cases. He grants, suspends and cancels licences for firearms, explosives and petroleum. He has duties to perform in respect of the jails, anti-corruption matters and issue of passports. He allows, in suitable cases, nationality certificates as also certificates to applicants claiming that they belong to the Scheduled Castes or the Scheduled Tribes. As the executive head of the district and the principal local agent of the Government, he also performs various residuary duties. In emergencies like floods and famines, he is expected to take necessary steps for arresting the impact of the calamities and providing relief to the victims. When the security of the country is threatened, the District Magistrate assumes the role of the Controller of Civil Defence. He is also periodically saddled with the onerous task of

conducting all General and by-elections within the district. The decennial census operations, again, call for his active help and participation. Matters relating to food and civil supplies also engage his constant attention these days although there is a District Controller of Food and Civil Supplies with an adequate establishment under him. To keep the various branches of administration posted on all matters relating to his varied charge, he sends to the Divisional Commissioner and the Departments and Directorates concerned a number of periodical reports and returns.

In the present democratic set-up, a Magistrate-Collector is nothing if he is not in constant and intimate touch with people in all walks of life living under his care. To achieve this end, he has to associate himself with numerous official and non-official bodies. The following list of organizations with which the District Magistrate of Hooghly is connected in some capacity or other will prove the enormity of his obligations in this behalf.

Official Committees

District Committee on Employment, Hooghly	Chairman
District Vigilance Commission	"
District Minority Board	"
District Diet Committee (for hospitals)	"
Hooghly District Tuberculosis Assn., Serampore	President
Regional Transport Authority	Chairman
District Tribal Welfare Committee	"
District Scheduled Castes Welfare Committee	"

Educational Institutions and Funds

Ramnagar Atul Vidyalaya	President
B. L. Mukherji Free Institution	"
Balika Bani Mandir (Primary)	"
Hooghly Govt. Collegiate School	"
Hooghly Institute of Technology	"
Hooghly Junior Technical School	"
Hiralal Paul College	"
Bandel St. John H. E. School	"
College of Textile Technology, Serampore	Chairman, Committee of Management
Dr. B. C. Roy College	President
R. C. Pal Sanskrit Chatuspathi	Administrator
Elokeshi Scholarship Fund	"
Nabakrishna Scholarship Trust Fund	"
Ganga Narayan Gupta Free Studentship Fund	"
Somra Durga Charan H. E. School Fund	"
Uttarpara School Scholarship Trust Fund	"
Upendra N. Majumdar's Guptipara H. E. School Maintenance Fund	"
Muslim Education Society Fund	"
Hooghly Girls' H. E. School	President

Non-official Committees and Funds

Rabindra Parishad	President
Bharat Scouts & Guides Assn., Chinsura	District Commissioner
Sarada Janakalyan Samsad	Chairman
Sanat Kumar Staff Nurses Fund	Administrator
Benode Behari Trust Fund	"
Mohsin Endowment Fund	Local Agent

NON-OFFICIAL COMMITTEES AND FUNDS—*Contd.*

Hooghly Bally Bathing Ghat & Temple Repairing Fund	Administrator
Hooghly Public Library Fund	"
Tarachand Chatterjee Fund	"
Raja G. K. Deb Memorial Fund	"
Dr. Hem Chandra Bhattacharjee Fund	"
Indian Red Cross Society, Hooghly	Chairman
B. L. Mukherjee Trust Estate Fund	Trustee

Prior to the introduction of the Montagu-Chelmsford Reforms of 1919, the District Magistrates exercised close administrative and financial control over the local bodies within their jurisdictions but this was slackened to a great extent after 1919. The District Magistrate of Hooghly has now only a supervising authority over the municipalities in his district and may refuse to ratify municipal resolutions posing a threat to public peace. In cases of serious irregularity on the part of the municipalities, he may recommend their supersession to the Government. The Panchayati Raj in this district, as elsewhere in West Bengal, is a four-tier organization with the Gram Panchayats at the base, the Anchal Panchayats and Anchalik Parishads at the middle and the Zilla Parishad at the top. The District Magistrate is empowered to call for and inspect any papers of the Zilla Parishad, cause it to furnish information as he thinks necessary and inspect its office or of any institution under its control.

After independence, the successive Five Year Plans with their ambitious socio-economic development programmes have added new dimensions to the traditional functions of the Magistrate-Collector. The district-level officers of various departments concerned with agriculture, irrigation, animal husbandry, co-operation, small and cottage industries, panchayats, education, social education, communication, health, rural engineering etc. normally work under their respective departmental superiors but the District Magistrate, as the sole co-ordinating agency in the district, gives them general guidance, assesses their progress and ensures that obstacles in the implementation of their programmes are removed. He is assisted in this behalf by a Special Officer, Planning and Development. As regards supervision of his own office, the District Magistrate depends on the services of an Office Superintendent and a Head Clerk who look after the work of the clerical staff of the Collectorate.

The Additional District Magistrates

Besides the District Magistrate, there are two Additional District Magistrates in Hooghly having equivalent powers and exercising concurrent jurisdiction with the D.M. One of them is designated the Additional District Magistrate (General), while the other is known as the Additional District Magistrate (Estate Acquisition). The former usually remains in charge of the district in the absence of the D.M. and the latter holds charge of the district when both the D.M. and the A.D.M. (General) are away.

The Additional District Magistrate (General) looks after the

criminal work of the district including criminal appeals and motions. His other charges are the Judicial Munsikhana, Land Acquisition matters including requisition of houses, Land Registration, Bengal Agricultural Debtors' Act cases, including appeals, the Certificate Department, Certificate appeals and revision cases, the Revenue Munsikhana including civil suits other than those relating to vested lands and Estate Acquisition matters, the Local Self-Government Department including municipalities, Village Self-Government Act and Chowkidari and Panchayat matters and work connected with the Rural Primary Education Act. He also supervises the administration of the Record Room, Copying, Excise, Nezarath, Tanks Improvement, Registration and Loans Departments and is in superior charge of the National Volunteer Corps, the National Cadet Corps etc. Moreover, he has to act as the Administrator of Chandernagore.

The Additional District Magistrate (Estate Acquisition) is in charge of the Estate Acquisition Department including transfer of its staff and disciplinary matters, Touzi and Cess. He has also to perform residuary duties of the erstwhile Court of Wards and Khashmahal Departments. He attends to all civil suits relating to vested lands and deals with matters connected with the Damodar Valley Corporation. He has to perform certain routine duties relating to Accounts and Treasury and also to look after the administration of certain Trusts and Endownments such as the B. L. Mukherjee Trust Estate, the Hooghly Imambarah etc.

Deputy and Sub-Deputy Magistrates

The present strength of Deputy and Sub-Deputy Magistrates in the district is shown in the following table[1] subdivisionwise, the figures for the Sadar subdivision including the personnel meant for the district headquarters. At Sadar, Deputy Magistrates hold the

	Deputy Magistrate and Deputy Collectors	Sub-Deputy Magistrate and Sub-deputy Collectors
Sadar	11	18
Serampore	6	6
Chandernagore	2	5
Arambagh	2	6

posts of Subdivisional Officer (Sadar), the Senior Deputy Collector, the Deputy Controller of Civil Defence, the District Panchayat Officer, the Regional Transport Officer, the Special Officer, Planning and Development, the Special Land Acquisition Officer, the Settlement Officer, the Land Acquisition Officer for the Damodar Valley Project, and two Executive Officers, one for the Zilla Parishad and the other for the Wholesale Consumers' Co-operative Society. At Serampore the Deputy Magistrates are employed as the Subdivisional

Officer (sometimes officers of the Indian Administrative Service are also appointed as such), the Additional Deputy Controller of Civil Defence, the Executive Officer of the Consumers' Co-operatives, besides three officers engaged in trying criminal cases and doing departmental works. At Chandernagore the Subdivisional Officer and the Second Officer are usually Deputy Magistrates. (As in Serampore, officers of the I.A.S. cadre are occasionally posted to hold charge of this subdivision as well). At Arambagh also the posts of the Subdivisional Officer and the Second Officer are held by Deputy Magistrates.

Of the 18 Sub-Deputy Magistrates employed in the Sadar subdivision (including the district headquarters), 6 function as trying courts, 2 attend to departmental duties, another 2 act as Additional Land Acquisition Officers, 3 work as Treasury Officer, Special Officer for Tribal Welfare and a Probationary Officer besides 5 employed as Block Development Officers. At Serampore, Chandernagore and Arambagh there are 4, 3, and 5 Sub-Deputy Collectors respectively working as Block Development Officers. The remaining 2 Sub-Deputy Magistrates at Serampore and Chandernagore each and 1 at Arambagh handle departmental works or sit as trying courts.

Agricultural administration

The Principal Agricultural Officer is in overall charge for implementing all agricultural schemes in the district. Responsible as he is for the promotion of intensive agriculture within his jurisdiction, he is to make arrangements for adequate supply of fertilizers, pesticides, improved seeds and farm implements. He is also to undertake minor irrigation projects and to foster technical training for intensive cultivation. He is technically assisted by a District Agronomist (Crops), a District Agronomist (Farm and Seed) and a District Plant Protection Officer. The Subdivisional Agricultural Officers, the two District Agronomists and the District Plant Protection Officer help the P.A.O. in execution of different agricultural schemes. The P.A.O. also utilizes the services of a Manure Development Officer, a Fruit Development Officer and a Plant Protection Assistant. The Jute Development Inspector and an Officer on Special Duty connected with the D.V.C. have for their jurisdiction the two districts of Howrah and Hooghly taken together. There are, besides. 5 Agricultural Overseers responsible for the maintenance of stores. Of them 2 are attached to the office of the P.A.O. while 1 each is posted at Hooghly, Arambagh and Serampore respectively. Eight Agricultural Demonstrators assist in the field the Manure Development Officer, the Fruit Development Officer, the Plant Protection Assistant, the Jute Development Inspector and the Officer on Special Duty connected with the D.V.C. There is also a number of Field Assistants and Field Men for the same purpose. The Principal Agricultural Officer is also assisted by two Sub-Assistant Engineers and one Surveyor in matters relating to the setting up of new small irrigation schemes.

Of the 17 blocks in the district, 14 are covered by intensive cultivation programmes each of which has an Agricultural Extension Officer who is helped by two Assistant Agricultural Extension Officers. The responsibility for the implementation and success of the agricultural development projects in the block rests with them. There is also an Agricultural Demonstrator in each block to assist the Block Development Officer and other Agricultural Extension Officers in technical matters. Each block has a Jute Field Assistant to look after the implementation of jute development schemes under the guidance of the Block Development Officer, the Agricultural Extension Officer and the Jute Development Inspector. A Sub-Assistant Engineer is attached to each block to operate all irrigation schemes. A Fitter-Mechanic is responsible for maintenance and servicing of mechanical equipments of the Block Workshop. He also comes to the aid of the Agricultural Extension Officer in matters relating to demonstration and popularization of the use of agricultural implements and pumping plants. Besides, a number of Gram Sevaks (intensive and normal) work under the B.D.O. and the A.E.O. in implementing agricultural development schemes within their respective areas.

In each of the 3 blocks of the district not yet covered by intensive cultivation programmes, there is an A.E.O. responsible for working out all agricultural projects within his jurisdiction. He has under him an Assistant Agricultural Extension Officer, an Agricultural Demonstrator for advice in technical matters, a Jute Field Assistant who looks after the Jute Development Schemes, a Sub-Assistant Engineer for executing small irrigation schemes and a Fitter-Mechanic for maintaining and servicing the machinery and implements of the Block Workshop. Besides, Gram Sevaks look after the popularization of agricultural programmes within their respective areas.

The District Seed Farm at Chinsura is supervised by a Manager who has under him two Agricultural Overseers and a Mechanic who looks after the maintenance of the pumping sets and other agricultural implements. There are in all 8 Block Seed Farms in the district each of which is headed by an Assistant Farm Manager. Four of these have a Light Tractor-cum-Pump Driver each and the other four, where there is no Japanese Power Tiller, employ one Pump Driver each. There are also a Cattle Keeper and a Chowkidar in each of these Farms. The Japanese Model Farm at Dhaniakhali has a Farm Manager who is assisted by a Mechanic-cum-Driver to operate and maintain light tractors, pumping plants and other agricultural implements. The establishment expenditure incurred by the entire agricultural set-up in the district in 1965-66 was Rs. 5,08,640.

Agricultural Engineering administration

The Assistant Engineer Agri-Irrigation (I) is responsible for the implementation of deep tube-well irrigation schemes in the district. He has 2 Sub-Assistant Engineers, 1 Supervisor and 2 Surveyors to

help him. Besides, there are 1 Driver-cum-Mechanic, 1 Mechanic, 1 Store Keeper, 1 Jeep Driver and 2 Chainmen to assist in field operations while office work is carried on by 1 Accounts Clerk and 1 Clerk-cum-Typist. The total expenditure for this set-up during 1965-66 was Rs. 83,652.

The Assistant Engineer, Agri-Irrigation (II) looks after constructional works of Seed Stores, Thana Seed Farms, minor irrigation schemes and allied matters. He gets technical assistance from 2 Sub-Assistant Engineers, 3 Surveyors, 3 Work Assistants, 1 Mechanic and 2 Chainmen besides clerical hands to run his office.

The Assistant Engineer (Agri-Mechanical) has for his jurisdiction both the districts of Howrah and Hooghly and is responsible for the installation and maintenance of engines and pumps and the upkeep of Thana Farm machinery. He has under him 3 Sub-Assistant Engineers to look after the different river pump irrigation schemes, and 1 Sub-Assistant Engineer attached to the Singur Padma Cold Storage. 2 Surveyors assisted by 2 Chainmen attend to the survey of land at the different river pump irrigation centres for pipeline works while a number of mechanics service machinery installed at those places. There is besides the usual complement of clerical staff to handle office work. The total expenditure incurred by this establishment during 1965-66 was Rs. 19,926.

Animal Husbandry and Veterinary administration

The District Veterinary Officer is in overall charge of the animal husbandry and veterinary administration in the district He keeps himself conversant with the condition of local livestock and ensures prompt remedial measures against various forms of cattle diseases. The Veterinary Inspector under him is the Officer-in-Charge of the State Veterinary Hospital at Chinsura who takes preventive steps for the welfare of the cattle and poultry population within the Hooghly-Chinsura municipal area. The Veterinary Pathologist is in charge of the District Veterinary Laboratory attached to the State Veterinary Hospital at Chinsura and is responsible for all extension works in connexion with the investigation and diagnosis of veterinary diseases for which he stores and supplies sera-vaccines and other biological products to all veterinary units in the district. He furnishes materials to the Disease Investigation Officer attached to the Bengal Veterinary College, Belgachia to help veterinary researches. He also performs post-mortem examinations on animals in medico-legal cases sent to him by the police, collects evidence in suspected cases of cattle poisoning and transmits it, if necessary, to the Forensic Science Laboratory, Calcutta. The three Stationary Veterinary Assistant Surgeons are in charge of the State Veterinary Hospitals at Serampore, Chandernagore and Arambagh. They attend to the treatment of animals brought to the hospitals and store and supply biological products to field units within the respective subdivisions. They are also responsible for controlling cattle epidemics and taking prophylactic measures

within the respective municipal areas. Three Itinerant Veterinary Assistant Surgeons have, for their jurisdictions, one or more police stations each not covered by the 14 development blocks where 14 Veterinary Assistant Surgeons are posted—the duties and responsibilities of both groups of officers being treatment, control and prevention of poultry and cattle diseases. The Block Veterinary Assistant Surgeons perform additional duties in connexion with the management of the Block Veterinary Dispensaries and extension work within their respective jurisdictions. There are in all 49 Veterinary Field Assistants in the district who are generally employed either in a Veterinary Dispensary of an Itinerant Veterinary Assistant Surgeon or a Block Veterinary Dispensary or a Veterinary Aid Centre (Extension) attached to a block. Of the assisting technical members, mention may be made of a number of Compounders, Laboratory Attendants and Animal Attendants. The District Veterinary Officer is assisted in his office work by the usual complement of clerical staff. The total establishment expenditure incurred by this set-up during 1965-66 was Rs. 2,90,312.

The Livestock Organization

The District Livestock Officer having his headquarters at Chinsura is responsible for livestock administration in the districts of Howrah and Hooghly. Five Assistant Livestock Officers work under him at the subdivisional level. Besides, he has 1 Livestock Officer for mass castration work and 7 other officers to look after the artificial insemination programme. The set-up also includes 1 Poultry Supervisor, 1 Laboratory Assistant, 85 Field Assistants, 7 Milk Recorders, 14 Stockmen and a number of attendants and messengers for carrying semen besides clerical staff for carrying on office work. The total establishment expenditure for this organization during 1965-66 was Rs. 2,09,695.

The Industrial administration

The District Industrial Officer holding his office at Chinsura supervises the developments of cottage and small scale industries in the district. He is assisted by an Investigator who attends to loan cases under the Bengal State Aid to Industries Act, import applications, distribution of scarce raw materials, supply of services at concessional rates etc. and an Inspector-Organizer who looks after matters concerning the rehabilitation of displaced goldsmiths, while an Assistant Inspector handles registration cases of small industrial units and statistical works. The establishment expenditure for the above set-up and the usual clerical staff amounted to Rs. 19,735 in 1965-66.

Weights & Measures set-up

The Assistant Controller of Weights and Measures, with headquarters at Chinsura, administers within the district the provisions of the West Bengal Standards of Weights and Measures (Enforcement) Act of 1958 and the Rules made thereunder in 1959. Four Inspectors of Weights and Measures work under him in the four subdivisions of the district. They verify and stamp weights and measures, seize such of them as are unauthorized and perform other works in exercise of

the powers conferred on them by the aforesaid Act and Rules. The expenditure for this establishment, including clerical staff, during 1965-66 was Rs. 39,234.

The Co-operative administration

The Assistant Registrar of Co-operative Societies heads the co-operative administration of the district. Supervision and inspection of co-operative societies, discharging the functions of a Certificate Officer, hearing of appeals from the orders or awards of arbitration of co-operative societies also come within the purview of his duties. He has under him a District Auditor of Co-operative Societies to look after the statutory audit of co-operative societies in the district and a Co-operative Development Officer to superintend all works under the various development schemes as also to inspect the co-operative societies constituted under such schemes. There are, besides, 2 Executive Officers, Wholesalers' Co-operative Stores (who are ex-officio Asst. Registrars of Co-operative Societies), one at Chinsura and the other at Serampore. 17 Co-operative Inspectors are responsible for the organization, supervision, general inspection, arbitration of disputes and implementation of various development schemes within the block areas and 5 Inspectors are entrusted with similar jobs in circle areas while 7 Inspectors help the Assistant Registrar in matters relating to organization, vitalization of credit and marketing societies, scrutiny of financial proposals and assessment of financial standing, procurement of commodities as per Government orders, preparation and scrutiny of long-term and short-term loan proposals of Central Banks, preparation and submission of periodical developmental statistics regarding programmes of co-operative movement and liquidation of co-operative societies. There are, moreover, 3 Inspectors to look after the 'prestige' co-operative units: one is in charge of the District Co-operative Land Mortgage Bank and the other two maintain a liaison between the primary co-operative stores and the wholesale consumers' stores of the Hooghly Range. There are also 20 Auditors of Co-operative Societies who are primarily concerned with the audit of the co-operative societies in the district although their services may be requisitioned, when necessary, for inspection etc. of these bodies. An Industrial Supervisor administers in particular the industrial societies keeping an eye on proper utilization of Government assistance and recovery thereof. Including the expenditure incurred on the office staff, the establishment cost of the co-operative set-up in the district was Rs. 1,87,300 in 1965-66.

The school administration

The District Inspector of Schools exercises general supervision over all types of schools, primary or secondary, in the district. He also controls the training institutions and non-Government Madrasas. He releases general or special grants to all types of schools entitled to get them. He also acts as the ex-officio Secretary of the District School Board which is, *inter alia*, responsible for the management, expansion and improvement of primary education in the rural areas

of the district. He has two Assistant Inspectors under him, one of whom assists him in connection with the inspection of elementary schools (Junior High and Senior Basic Schools up to Class VIII) while the other helps him in the discharge of his duties as the Secretary, District School Board as also in matters relating to the collection of education tax. There are, besides, 8 Deputy Assistant Inspectors of Schools for inspection of primary schools and elementary schools (Junior High and Senior Basic Schools up to Class VIII) and for preparation of bills for primary school teachers and 13 Sub-Inspectors of Schools with more or less similar duties. A Senior Technical Assistant assists the D.I. of Schools in preparing the annual statistical returns. A post of District Survey Officer was created on a temporary basis for three months with effect from March, 1966 for conducting an educational survey in the district. Three Music Instructors are posted at Chanditala (II), Pursura and Arambagh Blocks for teaching vocal music to the teachers of primary and junior basic schools as also at social education centres. Including the costs for the office staff, the total establishment expenditure incurred by this set-up during 1965-66 was Rs. 1,94,699.

The Social Education set-up

The District Social Education Officer is responsible for implementing various social education programmes in the district. He is to inspect and supervise Adult Education Centres, Adult High Schools, Public Libraries, Vijnan Mandirs, School-cum-Community Centres and Area Libraries, all imparting social education. He sanctions grants to most of these institutions as also to Social Education Centres, Folk Recreational Parties, Government-sponsored Libraries and Library Centres for the neo-literates. He is the ex-officio Secretary of the District Advisory Council of Social (Adult) Education, the convenor of the Public and Social Welfare Standing Committee of the Hooghly Zilla Parishad, the ex-officio Secretary of the Uttarpara Jaikrishna Public Library and the Joint Secretary of the Hooghly Rabindra Parishad. He has a Technical Assistant to help him in inspecting and supervising social education institutions, particularly the Pilot Project Schemes and the One-teacher Pathsalas. Another officer under him, who is attached to the Vijnan Mandir at Itachuna, conducts research works and organizes lectures, exhibitions, film shows and competitions to make the general populace, and especially the school students, science-minded. For organizational work 17 Social Education Organizers and 17 Mukhya Sevikas are posted in the 17 blocks of the district. Their services as also those of the Librarian and a Library Assistant attached to the Jaikrishna Public Library, Uttarpara are placed under the local Block Development Officers but the District Social Education Officer retains some essential control over them. The establishment expenditure incurred by the D.S.E.O's organization during 1965-66 was Rs. 23,324.

Physical Education and Youth Welfare administration

The District Officer for Physical Education and Youth Welfare is responsible for planning, organizing and supervising physical education, sports and games in all grades of educational institutions, youth clubs and associations in the district. He also superintends A.C.C. activities in secondary schools. A District Organizer of Physical Education assists him in his various functions. The total expenditure for the establishment during 1965-66 was Rs. 10,651.

The Commercial Tax administration

The District Commercial Tax organization with its headquarters at Serampore is manned by one Commercial Tax Officer, Grade I, one Commercial Tax Officer, Grade II, one Inspector of Commercial Taxes and the usual complement of office staff. The Commercial Tax Officers are directly responsible for collection of taxes under the Bengal Finance Sales Tax Act, the Bengal Motor Spirit Sales Taxation Act, the Bengal Raw Jute Taxation Act—all of 1941, the West Bengal Sales Tax Act, 1954 and the Central Sales Tax Act, 1956. The following table shows the number of assessees under each of the aforesaid Acts and the revenues collected from them in the Hooghly district during 1965-66.

Name of the Act	Number of assessees	Revenue collected (Rs.)
The Bengal Finance (Sales Tax) Act, 1941	1,093	16,53,000 (Approx)
The Bengal Motor Spirit Sales Taxation Act, 1941	78	12,91,000 („)
The Bengal Raw Jute Taxation Act, 1941	Nil	Nil
The West Bengal Sales Tax Act, 1954	7	16,000 („)
The Central Sales Tax Act, 1956	353	1,18,000 („)
Total		30,78,000 („)

Against a total collection of Rs. 30,78,000 in 1965-66, the total collection charges (which are equivalent to the establishment expenditure) amounted to Rs. 45,348 (actual).

Agricultural Income-Tax administration

No separate establishment under the Bengal Agricultural Income-Tax Act of 1944 functions in Hooghly which along with the Howrah district falls wtihin the jurisdiction of the Agricultural Income-Tax Office, Calcutta, Range I. The total number of assessees in Hooghly for the year 1965-66 was 611 and the total demand and collection for the same year were Rs. 43,340 and Rs. 65,187 (including arrears of previous years) respectively.

Food and Supplies administration

The District Controller of Food & Supplies, Hooghly is in overall charge of the food and supplies organization of the district excepting the rationing branch which is directly under the supervision of a Deputy Controller of Rationing. The District Controller is assisted in his varied duties by an Assistant District Controller, 5 Chief Inspectors, 26 Inspectors, a number of Sub-Inspectors, an Auditor

and the usual complement of clerical staff. The total establishment costs incurred by his organization during 1965-66 were Rs. 83,36,480.

The Subdivisional Controller of Food & Supplies, Hooghly Sadar is directly responsible for the distribution of foodgrains and consumer goods in the Sadar subdivision of the district. He has under him 3 Chief Inspectors, 8 Inspectors, several Sub-Inspectors and a number of office staff. His organization incurred an establishment expenditure of Rs. 1,33,587 during 1965-66.

The Subdivisional Controller of Food & Supplies, Chandernagore similarly looks after the distribution of foodgrains and consumer goods within that subdivision. He has under him 2 Chief Inspectors, 6 Inspectors, a number of Sub-Inspectors and the usual complement of clerical staff. His establishment expenditure during 1965-66 was Rs. 72,500.

The Subdivisional Controller of Food & Supplies, Serampore performs analogous duties within his jurisdiction with the help of 2 Chief Inspectors, 5 Inspectors, some Sub-Inspectors and a number of office staff. He incurred an establishment expenditure of Rs. 1,12,460 during 1965-66.

The Assistant District Controller of Food & Supplies, Arambagh is in charge of the organization relating to procurement, custody and distribution of foodgrains within that subdivision. There are 3 Chief Inspectors, 19 Inspectors, several Sub-Inspectors and the customary office staff to help him. The establishment expenditure in his case amounted to Rs. 16.144 in 1965-66. There is also a Subdivisional Controller of Food & Supplies at Arambagh who is assisted by 3 Chief Inspectors, a few Sub-Inspectors and the usual office staff. His establishment expenditure in 1965-66 was Rs. 94,297.

The Rationing organization

The industrial belt of Hooghly falls within the Greater Calcutta Area where statutory rationing was introduced on January 5, 1965 under the Calcutta Industrial (Extended) Area Regulation of 1964. The family identity cards which were previously in use under the Modified Rationing Scheme were treated as ration documents for distribution of declared rationed articles and sugar to consumers. Establishment permits already issued have since been replaced by separate ration documents under the West Bengal Rationing Order, 1964. The system of family identity cards having been found to suffer from inherent disadvantages, a decision was taken to switch over to individual ration cards in successive stages as early as possible. A heavy exodus of refugees, particularly in 1964, as also an influx of persons from other States partly accounts for the large number of rationing registrations which totalled 6.94 lakhs in the district in the middle of August, 1966. Statutory rationing in the area, departmentally termed the Hooghly Sub-Control, is administered by 8 Rationing Offices the location, jurisdiction and establishment expenditure of which in 1965-66 are shown in the table below.

Name of the Rationing Office	Jurisdiction	Total establishment expenditure in 1965-66 (Rs.)
Uttarpara-Kotrung Rationing Office: 64B, G. T. Road, Bhadrakali	Uttarpara-Kotrung municipal area	46,669
Rishra-Konnagar Rationing Office: 65, S. C. Deb Street, Konnagar	Municipal areas of Rishra and Konnagar municipalities	55,310
Serampore Rationing Office: 19, Raja K. L. Goswami Street, Serampore	Serampore municipal area	71,050
Baidyabati Rationing Office: 156, S. C. Mukherjee Road, Baidyabati	Baidyabati municipal area	37,258
Champdani-Bhadreswar Rationing Office: 36, G. T. Road, Bhadreswar	Municipal areas of Champdani and Bhadreswar municipalities	56,880
Chandernagore Rationing Office: 1889, G. T. Road, Chinsura	Chandernagore municipal corporation area	46,658
Hooghly-Chinsura Rationing Office: 46, Charghata, Kutchery Road, Hooghly	Hooghly-Chinsura municipal area	60,255
Bansberia Rationing Office: 6, Dakshin Para, Main Road, Bansberia	Bansberia municipal area	29,439

Each of the above Rationing Offices is headed by a Rationing Officer who is usually assisted by an Assistant Rationing Officer, an inspecting staff and clerical hands for office work and maintenance of records and statistics. The table below shows the distribution of executive personnel under each Rationing Office.

Rationing Office	Rationing Officer	Asst. Rationing Officer	Chief Inspector	Inspector	Sub-Inspector	Asst. Sub-Inspector
Uttarpara-Kotrung	1	1	1	1	7	1
Rishra-Konnagar	1	1	1	1	9	1
Serampore	1	1	1	3	13	2
Baidyabati	—	1	1	1	7	2
Champdani-Bhadreswar	1	1	1	2	12	2
Chandernagore	1	—	1	2	9	2
Hooghly-Chinsura	1	1	1	2	11	2
Bansberia	—	—	1	1	7	1

The essential responsibility of this personnel is to ensure regular supply of rationed articles to the consumers through appointed retailers who get their supplies, on pre-payment, from selected

wholesalers according to indents passed by the Rationing Officers. The wholesalers in their turn lift stocks from Government godowns, on pre-payment, under permits issued by the Deputy Controller of Rationing, Hooghly who supervises the working of the aforesaid Rationing Offices.

The Fisheries administration

The District Fishery Officer is responsible for implementing all schemes of his department in the district, supervising technical work relating to the development of pisciculture within his jurisdiction, sanctioning, drawing and disbursing loans under various projects for piscicultural development and recovering the same and crediting the proceeds to the local treasury. He is assisted by 3 Assistant Fishery Officers at the subdivisional level, one at Chinsura for the Sadar subdivision, one at Serampore for Serampore and Chandernagore and another at Arambagh for that subdivision. There are besides 2 Fishery Sub-Overseers employed on field work one of whom is posted at Chinsura for the Sadar subdivision while the other is stationed at Serampore for the Serampore and Chandernagore subdivisions. The District Fishery Officer and the Assistant Fishery Officers have the usual complement of office staff. The total establishment expenditure incurred by the set-up during 1965-66 was Rs. 32,476.

Rural Water Supply organization

The Assistant Engineer, Rural Water Supply implements rural water supply schemes within the district. He is technically assisted by a number of Sub-Assistant Engineers, Sub-Overseers, Work Assistants, Mechanics, Assistant Fitters and Helpers. The total establishment costs of this organization during 1965-66 amounted to Rs. 1,29,035.

There is a separate establishment of the Sub-Assistant Engineer, Arambagh, who looks after similar projects in that subdivision. Besides a Sub-Overseer and a Work Assistant, he has under him a Mechanic and a Helper for re-sinking of tube-wells and a number of Mechanics, Fitters, Assistant Fitters, Helpers to assist him in repairing derelict tube-wells. He incurred an establishment expenditure of Rs. 34,361 in 1965-66.

Information and Public Relations administration

The District Information Officer is in overall charge of information and public relation works in the district through various media. A Subdivisional Information Officer assists him in the discharge of his duties in the Sadar subdivision and also functions as the Officer-in-Charge of the District Information Centre, Hooghly. There are, moreover, 3 Subdivisional Information Officers, 1 each for the subdivisions of Chandernagore, Serampore and Arambagh of whom the Subdivisional Information Officer, Serampore has under him an Operator, a Driver and a Peon to look after the proper functioning of the Audio-Visual Unit placed at his disposal. A Technical Supervisor, assisted by a Laboratory Assistant and an Electric Mistry attends to the installation and maintenance of rural and school broad-

casting sets. A Senior Operator helped by an Assistant Operator is in charge of the District Audio-Visual Unit. A Medical Officer and a Compounder work in the Mobile Medical Section attached to the Unit and render medical aid when required. The total establishment expenditure of this set-up, including the office staff, was Rs. 63,065 in 1965-66.

The Irrigation set-up

Under the Executive Engineer, Lower Damodar Irrigation Division, there are 2 Assistant Engineers, one for the Singur Irrigation subdivision and the other for the Champadanga Irrigation subdivision. The former consists of Singur, Polba, Dadpur, Magra, Balagarh and Pandua police stations while the latter comprises Dhaniakhali, Tarakeswar, Jangipara, Haripal and Chanditala thanas. The Assistant Engineers are responsible for execution of different irrigation schemes and preparation of irrigation test notes for both Kharif and Rabi cultivation within their respective jurisdictions. There are in all 10 Sub-Assistant Engineers for technical supervision of works and a Surveyor for investigation and survey besides the usual complement of office staff. The total establishment expenditure for 1965-66 was Rs. 1,45,000.

The Executive Engineer, Hooghly Irrigation Division, has 2 Assistant Engineers under him stationed at Chandernagore and Arambagh. Under them there are 6 Sub-Assistant Engineers and 2 Surveyors for supervision of works besides the usual clerical staff. The work-charged wing of this set-up consists of a number of Work Assistants and Work Khalasis. The establishment cost of this set-up was Rs. 67,312 in 1965-66.

Labour and allied administration

The labour administration in Hooghly is run by one Assistant Labour Commissioner and one Labour Officer posted at Chandernagore. They attend to all labour matters in the registered factories of the district and maintain a liaison between them and the Labour Directorate of the State Government. The Registrar of Trade Unions, West Bengal, with his office in Calcutta, is the Registrar for all the districts of West Bengal including Hooghly. The West Bengal Shops and Establishments Act of 1963 and the Rules made under it in 1964 have been in force in all important towns of the district and to look after their enforcement one Supervising Inspector of Shops and Establishments is posted at Chandernagore. He has under him 3 Inspectors, one each at Chandernagore, Serampore and Tarakeswar. The Inspector posted at Chandernagore exercises jurisdiction over Chandernagore, Boinchi, Pandua, Bansberia, Hooghly, Chinsura, Bhadreswar and Champdani. Serampore, Uttarpara, Kotrung, Konnagar, Rishra, Sheoraphuli, Baidyabati, Jangipara, and Chanditala are under the Inspector posted at Serampore while the Inspector posted at Tarakeswar has under him Tarakeswar, Champadanga, Arambagh, Dhaniakhali and Singur. The Inspectors act as registering authorities for shops and establishments and launch prosecutions

against violations of the provisions of the Shops and Establishments Act and Rules. The total number of shops registered in the district is 13,035 but the number of employees working in them is reported to be only 5,309 which is explained by the fact that most of the shops are small establishments offering little scope for employment of helpers. The total establishment expenditure incurred during 1965-66 by the Shops and Establishments organization in the Hooghly district was Rs. 23,689.

The Settlement organization

A Settlement Officer is in overall charge of revisional settlement operations in the three districts of Howrah, Hooghly and Nadia, each of which is under the direct administration of one Charge Officer. The Charge Officer, Hooghly supervises surveys, preparation of records-of-rights and compensation assessment rolls under the West Bengal Estates Acquisition Act and payment of compensation to ex-intermediaries up to a limited amount. There are in all 13 Special Revenue Officers with the additional designation of Assistant Settlement Officer who hold charge of the various settlement camps comprising one or more police stations in the district. They look after the preparation of compensation assessment rolls and the draft and final publication of the same. They also hear objections in connexion with the compensation assessment rolls and payment of final compensation to ex-intermediaries in some specific categories of cases. They also perform certain duties in connexion with the revision of records-of-rights. There are besides 14 Kanungos with the additional designation of Revenue Officer attached to the settlement camps for correction of records-of-rights, checking of compensation assessment rolls and assisting the Special Revenue Officers in their case work. A number of Peshkars, Clerks, Janch-mohurrirs, Tamil Clerks, Sadar Amins and Badar Amins work in the respective wings of the organization. The total establishment expenditure incurred by the Hooghly Settlement establishment during 1965-66 was Rs. 6,88,683.

The Fire Service organization

There are in all 8 fire stations in the district, the names and jurisdictions of which are given in the table below.

Name of Station	Jurisdiction
Uttarpara	Uttarpara municipal area
Konnagar	Konnagar municipal area
Rishra (Civil Defence)	—
Serampore	Serampore municipal area
Bhadreswar	Bhadreswar municipal area
Chandernagore (Civil Defence)	—
Hooghly	Hooghly-Chinsura municipal area
Bansberia (Civil Defence)	—

Each Fire Station is under the overall command of a Station Officer who is assisted by a Sub-Officer except the Serampore Fire Station which has one Station Officer and two Sub-Officers. The Station Officers are responsible for keeping themselves and their men acquainted with the water-supply arrangements within their respective areas as also with the topography of their jurisdictions and the fire risks involved in them. They are also to see that all appliances and equipments are kept clean and in perfect working order and that all fire calls are attended to promptly. Besides the Station Officer and the Sub-Officer, each Fire Station has Drivers, Leaders and Firemen whose total number in all the stations in the district taken together are 38, 26 and 190 respectively. In 1965-66 the Fire Service organization of the district attended to 138 fire calls and 53 rescue operations and the like.

The Registration administration

Although the Additional District Magistrate (General) is the ex-officio District Registrar, the District Sub-Registrar attends to the day-to-day work relating to registration of documents from all over the district. He is also the ex-officio Marriage Officer under the Special Marriage Act and the Hindu Marriage Act. He hears appeals against orders passed by the Sub-Registrars and is authorized to inspect all Sub-Registration and Marriage Registration offices in the district. There is also a Joint Sub-Registrar at Chinsura and 10 Sub-Registrars placed in charge of the outlying Registration Offices meant for registration of documents relating to movable and immovable properties situated within the jurisdiction of each such office. The 2 Registration Offices at the district headquarters and the 10 in the mofussil have the usual complement of office staff.

The volume of work transacted by the 12 Registration Offices in the district in 1965-66 is detailed in the following table.

Registration Office	No. of documents registered	Receipts (Rs.)	Expenditure (Rs.)	Revenue earned (Rs.)
Hooghly Sadar	11,933	1,56,611	49,837	1,06,774
Sadar Joint	8,465	65,992	15,766	50,226
Pandua	6,675	40,692	14,368	26,324
Dhaniakhali	8,780	57,134	16,467	40,667
Serampore	10,129	1,45,820	23,219	1,22,601
Janai	7,854	59,371	16,032	43,339
Haripal	9,905	72,072	17,277	54,795
Jangipara	7,603	53,464	16,229	37,235
Arambagh	11,195	1,02,483	21,913	80,570
Khanakul	9,166	64,851	17,592	47,259
Goghat	6,831	45,549	15,425	30,124
Chandernagore	3,618	49,616	12,660	36,956

The workload of these offices in 1965-66 in connexion with the Bengal Tenancy Act is shown in the table below:

Registration Office	Receipts (Rs.)	Expenditure (Rs.)	Revenue earned (Rs.)
Hooghly Sadar	998	1,425	—
Sadar Joint	726	770	—
Pandua	585	291	294
Dhaniakhali	795	770	25
Serampore	1,070	847	223
Janai	902	851	51
Haripal	641	876	—
Jangipara	767	220	547
Arambagh	1,285	823	462
Khanakul	907	880	27
Goghat	780	880	—
Chandernagore	317	Nil	317

The P.W.D. set-up

The Public Works administration in Hooghly is headed by an Executive Engineer who is responsible for the execution and maintenance of all public works within the district. His duties include the inspection of all Government buildings within his jurisdiction, including the strong rooms of the District Treasury and Sub-Treasuries, once a year, prevention of encroachment on Government lands, and suggesting measures for the protection of such public buildings as may fall into decay. He has under him 3 Assistant Engineers working in the Sadar, Serampore and Chandernagore subdivisions besides an Assistant Engineer supervising the expansion of the Chinsura Sadar Hospital. The Executive Engineer is further assisted in his technical works by 19 Sub-Assistant Engineers, 4 Surveyors, 2 Draftsmen, 2 Tracers and 10 Work Assistants and has the usual complement of office staff and drivers of lorries and road rollers. The total establishment expenditure incurred by his organization during 1965-66 was Rs. 2,72,129.

The Construction Board under the Public Works Department has an Assistant Engineer who is in charge of the Hooghly Subdivision having jurisdiction over the whole of the district of Hooghly. He is assisted by 2 Sub-Assistant Engineers and the usual complement of office staff attending to all matters connected with the construction of public buildings within the district.

For electrical installations in all Government buildings in the district and their maintenance, there are 4 Sub-Assistant Engineers

who are helped by 2 Head Wiremen, 3 Senior Wiremen, 10 Junior Wiremen and 7 Junior Work Assistants. The total establishment expenditure incurred by this set-up during 1965-66 was Rs. 19,311.

The Public Works (Roads) administration

An Executive Engineer is in charge of construction of all types of roads, major and minor bridges and culverts etc. within the Hooghly Construction Division which has for its jurisdiction the whole of Hooghly and parts of Burdwan, Bankura and Nadia districts. He has under him 4 Assistant Engineers, designated S.D.O. (Roads), to assist him in the construction and supervision of roads, bridges and culverts within the Hooghly Construction Subdivision, Serampore Construction Subdivision, Arambagh Construction Subdivision and Mundeswari Bridge Construction Subdivision respectively. He has, besides, 12 Sub-Assistant Engineers (Estimators), a number of Draftsmen and Tracers and the usual complement of office staff. The Subdivisional Officers (Roads) are also provided with the requisite clerical hands. An expenditure of Rs. 1,67,820 was incurred for maintaining the whole establishment during 1965-66.

The Refugee Relief and Rehabilitation administration

The District Rehabilitation Officer, Hooghly assists the District Magistrate in all matters connected with the grant of relief to refugees and their rehabilitation. He has under him at the district headquarters 4 Additional Rehabilitation Officers for taking up enquiries into petitions, preparation of loan and grant cases and disbursement of loans and grants etc. An Amin under him is responsible for the survey of refugee colonies within the district. Two Subdivisional Rehabilitation Officers, one at Chandernagore and the other at Serampore, assist the respective S.D.O.s in the implementation of refugee and relief schemes. Besides, 1 Additional Rehabilitation Officer is attached to the office of the S.D.O., Chandernagore and 2 to the office of the S.D.O., Serampore with duties analogous to their counterparts at Sadar. The total establishment expenditure incurred by this organization during 1965-66 was Rs. 1,09,880.

Social welfare organization

During 1965-66, 125 vagrants were admitted and 18 discharged from the Female Vagrants' Home at Uttarpara, which is the only institution of its kind in the district providing vocational training and educational facilities in suitable cases. The unit is run by a Manager who is helped by an Assistant Manager, a Junior Social Worker, a Medical Officer and the usual staff. The expenditure incurred by the Home during 1965-66 was Rs. 1,43,204.

Another Home at Uttarpara shelters destitute women and male children up to the age of five. It admitted 18 and discharged 12 destitutes during 1965-66. Suitable inmates are given vocational training here and 20 students on an average attend the primary school attached to the Home. A Superintendent assisted by a Medical Officer and other staff runs the institution for which an expenditure of Rs. 47,040 was incurred during 1965-66.

THE CENTRAL GOVERNMENT SET-UP

The Income Tax administration

The Hooghly Income Tax Office has, in all, 4 Income Tax Officers, one of whom belongs to Class I while the others are in Class II service. All of them are Assessing and Collecting Officers having jurisdiction over the whole of the district. They are assisted by 4 Inspectors in matters relating to investigation, enquiries, survey, examination of accounts etc. One Supervisor, Grade II, and a Head Clerk along with other clerks, typists and Notice Servers help in the day-to-day official work. The total number of assessees, total revenue demand and total tax collection in the district for 1965-66 were 8,225, Rs. 14,43,000 and Rs. 32,55,000 (including arrears) respectively. The establishment expenditure incurred by the organization in 1965-66 was Rs. 1,55,106.

Postal administration

The jurisdiction of the Hooghly Postal Division extends over the entire district. A Superintendent of Post Offices is in overall charge of the administration helped by an Assistant Superintendent and 3 Subdivisional Inspectors. The strength of other staff in the Division is as below:

Supervisory and clerical staff in class III cadre	343
Postmen and other delivery staff in class III cadre	244
Class IV staff	148
Extra-departmental staff	690

There are 2 Head Post Offices in the Division, one at Chinsura and the other at Serampore, responsible for accounts, control of the Subordinate and Branch offices and drawal and disbursement of pay and allowances to all staff working within the Division. The Head Post Offices are supervised by 2 Post Masters in the Higher Selection Grade assisted by 7 Assistant Post Masters at Chinsura and 3 at Serampore besides the usual complements of office and delivery staff. The establishment expenditure incurred by the entire set-up during 1965-66 was Rs. 18,47,539.

National Savings Organization

Three District Savings Organizers posted at Chinsura, Serampore and Chandernagore look after the implementation of the National Savings schemes in the district. The first two have jurisdiction over the respective subdivisions while the third is in joint charge of Chandernagore and Arambagh subdivisions. These officers are under the overall supervision of the Assistant Regional Director of National Savings, Burdwan Division, 'A' circle, who has his headquarters at Howrah. The organizers discharge their responsibilities in close liaison with official and non-officials at the district, subdivision, block and village levels. There were 121 Savings Agents in the district on March 31, 1966 for selling various kinds of savings security to the public. The gross sales during 1965-66 were as follows;

Nature of Security	Value (in Rs.)
National Defence Certificate	25,64,000
National Savings Certificate (1st issue)	33,88,000
Defence Deposit Certificate	55,000
Post Office Savings Bank Account	2,01,96,000
Cumulative Time Deposit Account	1,48,000
Total	2,63,51,000

Customs & Central Excise

The Burdwan Customs & Central Excise Circle holds jurisdiction over the Sadar and Arambagh subdivisions of the district, the work relating to which is looked after by a Deputy Superintendent with the assistance of a complement of Inspectors, Sub-Inspectors and Sepoys. The Chandernagore Customs & Central Excise Circle, manned by one Senior Superintendent and other assisting Junior Superintendents, Inspectors, Sub-Inspectors and Sepoys, exercises jurisdiction over the Chandernagore and Serampore subdivisions except the Multiple Officers' Range Offices, one each at Konnagar and Hind Motor and two at Rishra, which are run by Superintendents and Deputy Superintendents, as the case may be, helped by the requisite complements of Inspectors, Sub-Inspectors and Sepoys.

ORGANIZATIONS UNDER STATUTORY BODIES

The West Bengal Khadi & Village Industries Board

The Board, the West Bengal branch of the All-India Khadi and Village Industries Commission, maintains a combined set-up for the districts of Howrah and Hooghly. Of the important members of the organization working in this area, mention may be made of a Circle Inspector, a Supervisor, an Administrator and a Guide for development of cane gur manufacture, an Area Inspector and 2 Supervisors for Khadi and a Supervisor for village oil industry.

Life Insurance Corporation

The Life Insurance Corporation of India has two branch offices in the Hooghly district, one at Chinsura and the other at Serampore. The former controls business in the Sadar and Chandernagore subdivisions while the latter does the same for the Serampore and Arambagh sbudivisions. Each of these offices is headed by a Branch Manager, assisted by two Assistant Branch Managers one of whom looks after the administration of the establishment and the other supervises field-work. There are 16 Development Officers attached to the Chinsura Branch, while the Serampore Branch has 21 of them. Each Branch Office has an Office Superintendent and the usual complement of clerical staff. The Corporation also runs two Development Centres at Arambagh and Tarakeswar. The former, established on 9.5.62, has jurisdiction over the subdivision while the latter, established on 4.6.62, covers the Dhaniakhali, Tarakeswar, Singur and Haripal police stations. There are 5 Development Officers attached to the

Centre at Arambagh and 8 at Tarakeswar, which has been converted into a Sub-Office since August, 1966.

State Electricity Board

The State Electricity Board's installations in the Hooghly district consist of a 132 K.V. transmission system with a 132 K.V. sub-station at Adi-Saptagram and 132 K.V. double circuit transmission lines connecting the sub-stations at Dharampur and Belmuri with the Bandel Thermal Plant.* A Divisional Engineer is in overall charge of the installations. Apart from his responsibility to supply power to the electric traction system and the extra high voltage transmission system, he also looks after the continuity of 33 K.V. supply to industrial units like Kesoram Rayons, Tribeni Tissues, Gourepore Electric Supply Co. and high voltage supply to the factories of Dunlop Rubber Co., Ganges Manufacturing Co. and other electric supply undertakings functioning within the district. Of late, he is also required to ensure supply of power to the deep tube-wells set up in the district under irrigation schemes. He is helped by 9 Assistant Engineers who are directly responsible for the operation and maintenance of the H. T. and L. T. systems and by 4 Assistant Controllers and 4 Operators engaged in shift duties at the control room of the 132 K.V. sub-station at Adi-Saptagram. There is besides an adequate complement of other technical and clerical staff. The establishment expenditure incurred for the entire set-up during 1965-66 was Rs. 2,22,384.

* A full account of the Bandel Thermal Plant has been given in the chapter on Industries.

NOTES

1 L. S. S. O'Malley—The Indian Civil Service 1801-1930 (Second Edn.). London, 1965. p. 163.
2 Source: District Magistrate, Hooghly.

CHAPTER X

REVENUE ADMINISTRATION

LAND REVENUE ADMINISTRATION

History of land revenue assessment and management

As O'Malley had pointed out in the old District Gazetteer of Hooghly,[1] it is very difficult to set forth in clear terms a pattern of the land revenue administration in the western parts of Bengal during the rule of Hindu and Buddhist monarchs, or for that matter, even during early Muslim rule in Bengal. Whatever evidence we have is obtained "by piecing together the fragmentary information which may be gathered from inscriptions and written works such as the *Dharma-sutras*."[2] It would appear that in the land revenue system of the Hindu-Buddhist and early Muslim periods "the *gram* or village was the unit of administration and that excluding waste or uncultivable lands and lands occupied by houses or set apart for village commons, the village lands fell into two groups, *viz*., those which paid rent, and those which did not. The latter included *brahmottar* or land granted to Brahmans, *debottar* or land dedicated to the gods for their worship, and *chakran* or service lands. Among service lands may be enumerated those held by village servants, such as barbers, washermen, carpenters, smiths etc. . . .

"The headman of the village, who was called *mandal*, had also a share in the village land by virtue of his office. He collected the rents due from the villagers, the amount of which varied according to the caste or position of the tenants, being less, for instance, in the case of Brahmans and other high castes than in the case of the low castes; it also varied according to the nature of the produce of the fields, those growing special crops being assessed to a higher rental. The usual share reserved for the king was one-sixth, rising to one-fourth or even one-third in special instances. . . .

"The villages were grouped into *vishayas*; *vishayas* into *mandalas* or circles; and *mandalas* into *bhuktis* or provinces, which had occasionally smaller divisions known as *bhagas* or sub-provinces. Each of these groups was placed under a head called, respectively, *vishayi*, *mandalika* or *maha-mandalika*, and Raja or governor. These officers collected the revenue from their subordinates and sent it on to the king's treasury, probably after deducting a commission. They were evidently removable at the king's pleasure, but the post in course of time became hereditary in many families.

"The early Muhammadan rulers were *Khalj*, *i.e.*, Turks, whose object it was to get as much out of the country as they could. They cared little for any organized system of collecting its revenues, and the accounts of their rules point to irregular exactions and enforced

tribute rather than to any regular assessment. By the time Tribeni with the north of Hooghly was conquered, Bengal had come under the sway of the Balbani Sultans, a somewhat more civilized set of rulers, from whose time onwards, we meet with attempts at some organized system of collection. Judging from inscriptions, the country appears to have been divided into revenue divisions called *mahals* which were placed under officers known as *shikdars*. The *mahals* were grouped into tracts known *arsahs* under *sarlashkars*, or military commanders, who had often the title of Vazir. The word *jungdar* was sometimes employed to denote a military commander in contra-distinction to a *shikdar* or revenue officer, and the word *thanah* was also used, meaning a standing camp established in a newly conquered area. The details of assessment are not known; but probably the old system of collecting through village headmen was left undisturbed as far as possible."[3]

The land revenue system and the landlord vis-a-vis cultivator relations during the Mughal period have been dealt with in some detail in the chapter on History and we may continue here with an examination of the circumstances obtaining after the death of Murshid Quli Khan, a period just preceding the assumption by the British of the revenue management in this part of the country. "In 1728 Murshid Kuli Khan's successor, Nawab Shuja-ud-din carried out a fresh settlement, known as *Jama Tumari Tashkash*. The *khalsa* lands were now divided into larger and smaller zamindaries, the present district of Hooghly and Howrah being comprised in the larger zamindari of Burdwan (revenue Rs. 20,47,506), and in the *mazkuri* or smaller zamindaries of Mandalghat (Rs. 1,46,261), Arsa (Rs. 1,25,351) and Muhammad Aminpur (Rs. 1,40,046). These zamindaries did not include the small *jagirs*, chiefly *madadmash* or subsistence lands, given to religious and learned men. Besides land revenue proper, the lands were assessed to various extra cesses known as *abwab*, of which the number and rate varied in different districts. . . . . These *abwabs*, fluctuating in demand and generally increasing in amount, were highly oppressive both to the ryots and the zamindars, and could only be realised with a great deal of trouble."[4]

Although the new land revenue system introduced by the British has been dealt with at some length in the chapter on History, it may be pertinent to summarize here briefly the connected events that took place between 1760 and 1793.

When Burdwan was ceded to the Company, along with Calcutta, Chittagong and Midnapur by Mir Kasim, by the treaty of 1760, the zemindari of Burdwan included the present districts of Hooghly and Howrah "except a small strip on the west bank of the Hooghly river which formed part of the zamindari *kismat* of Muhammad Aminpur."[5] "This strip, with the rest of Bengal, finally came under

British administration with the grant of the Diwani in August 1765. At first collections in the Burdwan zamindari lands were supervised by covenanted servants of the Company, but this system proved a failure."[6]

Harry Verelst, who was the Supervisor of Burdwan in 1765, restored the traditional system of revenue management and collections improved rapidly. Thus, in 1770, the revenue collections were Rs. 47,18,918 and the charges of the collections Rs. 6,61,486.[7] The famine of that year retarded collections for the next few years and the figure for 1783, including arrears, was only Rs. 36,96,825 against a net demand of Rs. 37,35,755 and a gross demand of Rs. 43,58,026.[8]

Pitt's India Act of 1784 ordered an enquiry "into the complaints of the dispossessed zamindars," and directed the Company to take immediate steps "for settling and establishing, upon principles of moderation and justice, according to the laws and constitution of India, the permanent rules by which their respective tributes, rents, and services shall be in future rendered and paid."[9] A direct result of this was the introduction of the Permanent Settlement in 1793, by which the demand on land was fixed in perpetuity in Bengal. "At first, the Permanent Settlement proved disastrous to the landholders, who, one after another, broke down under the strain of having to pay their revenue punctually and in full . . . . In this district the Raja of Burdwan escaped the ruin which fell on other zamindars by leasing out his estates in perpetuity to middlemen. Such a divestment of responsibility was diametrically opposed to the purposes for which the Permanent Settlement had been framed. . . .Nevertheless, it was generally discovered that this system formed the only means of escape from ruin for the old families of Bengal, who. encumbered with the costly paraphernalia of petty courts and military retainers, could not suddenly transform themselves into punctual rent-collectors and revenue-payers. By Regulation VIII of 1819 this *patni* system of subinfeudation was placed on a legislative basis."[10]

"The Permanent Settlement also failed to protect the cultivators. It endeavoured to substitute for the village record-of-rights a new system of declaratory leases (*pattas*); the system of *kanungos* was abolished, and the *patwaris* became practically the zamindars' servants. The result was that the practice of giving *pattas* could not be enforced by the Collectors, who had little time and less information; while the *patwaris*' village registers ceased to exist or were instruments in the hands of the zamindars for the coercion of their tenants. As early as 1819 the Court of Directors drew the attention of the Government 'to the state of insecurity and oppression in which the great mass of cultivators are placed', but it was not till after forty years' further correspondence and enquiry that the

customary rights of the cultivators were legally recognized by a series of agrarian laws beginning with Act X of 1859."[11]

O'Malley in the old Hooghly District Gazetteer published in 1912 gave an excellent account of the different types of land tenure held in the Hooghly district since the time of the Permanent Settlement. His description is briefly quoted below to present a full picture of the land tenure system obtaining in the district.

"The number of revenue-paying estates borne on the revenue-roll of Hooghly (which for this purpose includes Howrah) was 4,309 in 1907-08; while the number of revenue-free estates assessed to cesses was 536. Of the revenue-paying estates, 3,973 are permanently-settled, while 101 are temporarily-settled and 235 are held direct under Government. Among the estates last named, the most interesting are the Chinsura and Serampore Khas Mahals, which passed to the British from the Dutch and Danes respectively. Among other estates, mention may be made of the *aima* estates, which were originally tenures granted at a quit-rent. They were, in fact, fiefs assessed to a small revenue, and date back to the rule of the Muhammadans. The number of estates in this district has increased considerably during the last half century owing to the subdivision of proprietary rights. . . .

"One of the most common tenures is that known as the *patni taluk*. . . It is defined in Regulation VIII of 1819 as one created by a zamindar and held at a rent fixed in perpetuity, the tenant furnishing collateral security for the rent, and binding himself to certain conditions regarding the sale of the tenure for arrears, and also to the sale of his other property in case the proceeds of the sale of the tenure are not sufficient to pay off the entire sum due. The records show that there are 1,397 *patni* tenures in the district. . . .A *dar-patni* is an under-tenure created by a *patnidar*, to whom its holder pays rent, and is similar to a *patni* tenure in all respects. The district records return the number of these under-tenures in Hooghly at 200. *Se-patni* is a *patni* tenure of the third degree created by a *darpatnidar*. Other tenures are the usual *ijaras* or leaces, which have no special characteristics. Among them may be mentioned (1) *mukarari ijaras*, i.e., permanent or long-term leases granted at a fixed rate of rent for a valuable consideration, (2) ordinary *ijaras* or leases held for a limited term, (3) *dar-ijaras* or sub-leases subordinate to the foregoing, and (4) *zarpeshgi* or usufructuary leases granted for repayment of loans by collections of rents from the estate or *taluk* so let out.

"Rent-free tenures are exceptionally numerous in Hooghly; . . . The following are the principal varieties of rent-free tenures:—(1) *Lakhiraj*, or rent-free land granted as a reward for services performed or for some other special purpose. (2) *Debottar*, or lands granted for the worship of various Hindu gods, and vested in *sebaits* or trustees, who have no right to alienate such lands. (3) *Brahmottar*,

or lands granted for the support of learned and pious Brahmans. These are liable to be alienated. (4) *Mahattran*, or lands assigned by zamindars for the maintenance of religious and learned men, or of poor men other than Brahmans. (5) *Vaishnavottar*, or lands granted for the support of Vaishnavas. (6) *Pirottar*, or lands resembling the *debottar* lands of the Hindus, being grants made by Muhammadans for the maintenance of the worship of *pirs* or Musalman saints. (7) *Wakf*, or lands granted by pious Muhammadans for the maintenance of mosques or *masjids*, and for the purpose of feeding *fakirs* or religious mendicants. (8) *Chiraghi*, or lands granted for defraying the expenses of providing lights at the tombs of Muhammadan saints. (9) *Nazrat*, or lands presented for the maintenance of Muhammadan saints or holy men, and for defraying the expenses of festivals. (10) *Khairati*, or lands granted solely for charitable purposes. (11) *Khanabari*, or lands granted rent-free as sites of homesteads. There are a number of small private service-tenures held by *purohits*, or village priests, *napits*, or barbers, *kamars* or black-smiths, *malis* or gardeners and makers of garlands for decorating idols, and *dhobas* or washermen.

"The only peculiar service tenure is that of the *phanridars*, who were originally semi-military police holding rent-free lands and performing police duties. They date back to the early days of British rule and were described as follows by the Magistrate of Hooghly in 1828:— 'These *phanridars* are authorized to apprehend robbers and house-breakers, to report the occurrence of crimes to the police thanas, to patrol the villages attached to their *phanris*, to observe whether the *chaukidars* perform or neglect their duties, and generally to render every assistance to the police *darogas*. The total number of *phanridars* existing in this district amounted. . .in the year 1825 to 175 . . .and the total quantity of *chakran* land attached to the *phanris* amounted to 14,763 *bighas*.

"As the *phanri* system had long been superseded by newer systems, and was of very little use, Government in 1881 sanctioned an arrangement by which, when any of these men died or were dismissed, the vacancy should not be filled up, and their lands, which were specially excluded from the Permanent Settlement, should be taken charge of and settled by the Collector. . . . There are now only 54 *phanridars* in possession of *phanridari* lands."[12]

Writing in 1888 about the land tenures in Hooghly district, George Toynbee had said: "Perhaps in no other district in Bengal are rent-free tenures spread in very small patches over such a large area."[13] In Hooghly, as elsewhere, the Company, and from 1858 onwards, the British Indian Government were naturally very anxious to augment land revenue by the resumption of such alienated lands. Explaining the process of such resumptions and its effects, Toynbee was of the opinion that the project more often than not defeated its

own purpose. "In the previous year (1840) the Government had ordered that mehals of less than 50 beeghas should not be resumed. The Collector (of Hooghly) reported in 1842 that this order had done much good, but that the rich had escaped assessment, while the honest had not. He thought that only the surplus over 50 beeghas should be assessed. Reporting in 1844 on the effects of the resumption laws, the Collector stated that this order had been a source of bitter disappointment to many, because it was not made retrospective. Those who had come forward and declared their rent-free lands had thus fared worse than those who had hitherto concealed them, but who could now come forward and openly claim the benefit of the 50-beegha rule. He states that the holders of the smaller resumed mehals found it extremely difficult to pay their Government revenue, and that many of them would have given up their lands but that their forefathers had built their residences and resided on them for generations past. Many of these had, however, allowed their estates to be sold, some in collusion with the neighbouring talukdars, others because they were unable to resist their encroachments, but more still owing to their distressed condition and the inconvenience and expense of going to Hooghly to pay their Government revenue. . . . Thus a decennially-settled estate with a sudder jama of Rs. 12 fetched at auction Rs. 773, while a resumed lakhiraj assessed at half rates with Government revenue of Rs. 18 only fetched Rs. 55 !"[14] It seems that in 1840 the Collector of Hooghly was of the opinion that the laws relating to the resumption of alienated lands were directly responsible for the depreciation of their value, other contributory factors being damage caused by floods and stagnation of trade and commerce.

Early in the 19th century, the Company had tried the *khas* (direct administration) system instead of the usual farming system in certain areas of the district. The experiment failed and was withdrawn around 1836. Mr. W. H. Belli, Collector of Hooghly, had written to the Board in 1827: "Khas management, as far as it has come under my experience in this district, has completely failed, and I do confess I look upon the ryotwari system. as altogether impracticable here. We have been trying 4 years to explain the intentions of Government in this matter to the ryots generally of all estates similarly circumstanced, and not an individual has yet been induced to engage directly with the Government."[15] Toynbee sums up the position by saying: "The Khas system appears to have lasted up to the year 1836. when the Commissioner, agreeing with the Collector that the farming system was preferable, ordered him to call for farming tenders for all the khas estates in the district. As far as I can gather, the change was not an improvement, the farmers being no more punctual with their rents than the ryots, and oppressing the latter until they deserted."[16]

Toynbee also gave an interesting and detailed account of management of revenues in the *khas mahals* at the Dutch settlement of Chinsura and the Danish settlement at Serampore, and gave instances of some special types of tenures obtaining there.[17] After resumption of these lands by the British authorities, the revenue system operating elsewhere was gradually made applicable there as well.

During the 'Survey and Settlement Operations' in the district between 1930 and 1937, it was found that most of the forms of tenures mentioned by O'Malley still existed in Hooghly.[18] Among some of the peculiar tenancies especially noted were (a) the *khut-khamar* tenancies found in some villages of Khanakul P. S. which bore resemblance to the *utbandi* system in Nadia district; and (b) the *bata* tenancies in the Piarpur *khas mahal* and the Dankuni *bil* area. "The *khut-khamar* lands are let out to tenants who pay the market value of half of the produce in case of paddy, and 7/8ths in the case of jute grown. Before harvesting the landlords' agent appraises the value of the share of the crop, which is paid in cash. Cess is paid in addition to the amount of rent for which rent receipts are granted to tenants. For other crops which are harvested from time to time such as, vegetables or fruits, a fixed sum is levied every year. ... These holdings are heritable and have all other incidents of occupancy *raiyati* holdings."[19]

Of the '*bata*' tenancies, the following account was given: "The tenancy originates from a grant of fishery right which is exercised by the grantee on suitable '*ails*' and one cubit space on either side of the '*ails*'. The tenant can move over those *ails*, can repair them and can ply their *dongas* (small boats) on either side of the *ails*. In short the right of movement necessary for setting fish traps at convenient places on the *ails* or on their sides are reserved. The most peculiar feature of these tenancies is that landlords, who have no right over the lands of the *mauza*, have got right of granting *bata* settlements. How this right accrued to the landlord cannot be ascertained. It is, however, surmised that these landlords contributed liberally to the drainage of Dankuni *bil* and thus by common consent of all the landlords were allowed to grant 'bata rights' even in villages where they have no proprietary interests, but no documentary evidence in support of this surmise could be obtained."[20]

Speaking of lands in the direct possession of tenure-holders, the Report stated[21]: "The total area covered by tenures of all classes is 77,505 acres or about 121 square miles thus forming 9.95 per cent of the total area. The number of tenancies classified as 'tenures' is 83,782 which is 9.71 per cent of the total number of tenancies in the district. The distribution amongst different types of tenure-holders is indicated below:

Class of tenure	Number of holdings in class	Area of class in acres
I. Rent-free tenures	61,995	41,783
II. Service tenures	215	226
III. Permanent tenures at fixed rent	12,548	28,444
IV. Permanent tenures not at fixed rent	6,571	5,159
V. Permanent tenures on rent, rent in kind or mixed cash and kind	16	23
VI. Temporary tenures	346	560
VII. Other classes	2,091	1,310
Total	83,782	77,505"

About 54 per cent of the total land in the district was thus under the occupation of rent-free tenure-holders. Of the lands possessed by all three classes of *ryots* paying in cash (i.e. *mokarari ryots*, or those settled at fixed rates, occupancy *ryots*, and non-occupancy *ryots*), *mokarari ryots*, occupied 23.7 per cent of them. The number of holdings under this class of tenants amounted to 20.2 per cent of the total number of holdings under the possession of all three classes of tenants listed above.[22] The following explanation was offered to account for the comparative paucity of the number of *mokarari* holdings in the district: "This class formed about 17 per cent of the number of *raiyats* of all classes. The production of rent receipts by the *raiyats* to raise a presumption of fixity of rent under section 50(2) of the Bengal Tenancy Act, invariably results in the recording of *raiyats* under this class, in areas covered by *patni* leases. Frequent changes of *patnidars* as a result of sales for default of *patni* rent, place the incoming purchaser in the position of not being able to obtain old collection papers from the outgoing *patnidar* with the result that once the statutory presumption is raised, the *patnidar* is unable to rebut the presumption by the production of any of old papers showing that rent has been altered since the Permanent Settlement. The reason why in spite of this feature more tenancies were not recorded as *mokarari* is due to the fact that in several thanas the landlords had in fact enhanced rents several times within recent memory. It was found that in areas where previously petty settlement operations had been conducted, the tenants ignorant of their rights had failed to take advantage of section 50(2) of the Tenancy Act and did not come forward with sufficient rent receipts. Having failed at that time, they were now debarred from raising the presumption by the provisions of section 115 of the Act. The number of *mokarari raiyats* by contract as distinct from the statutory *mokarari raiyats* described above were very few."[23]

Settled and occupancy *ryots* constituted 70 per cent of the total number of *ryots* of all classes and the area under them accounted for 68.6 per cent of the total area held by all classes of *ryots*. But the number of holdings in possession of non-occupancy *ryots* was much smaller, being only 1,446, or 0.2 per cent of the total area held by *ryots* of all classes.[24]

About the small number of *ryots*, only 5,927 recorded as paying produce rent, the Report said[25]: "Cultivation under the *bhag* system is common throughout the district. Only a small percentage of the *bhagdars* however have found place in the record-of-rights on account of the fact that the proviso to section 3(17) of the Bengal Tenancy Act as amended in 1928 laid down that persons paying merely a share of the crop are not tenants except where they had been admitted as such by the landlord in writing or where they had been declared as such by Civil Court. The result of this was that most of the *bhagdars* not having had written admission from the landlord or decrees of Civil Courts, were treated as agricultural labourers and were omitted from the record-of-rights.... Only a small number of *bhagdars* could be recorded as tenants on account of the fact that the landlords as a general practice change the plots let out in *bhag* every few years although they generally employ the same *bhagdars*.... Before the proviso to section 3 (17) was amended in 1928, *bhagdars* who provided plough, cattle and seed were recorded as tenants and entered as such in the record-of-rights. A large number of *bhagdars* of this district would have under the old criterion been recorded as tenants. The effect of the 1928 amendment resulted in the majority of the *bhagdars* being recorded as agricultural labourers and excluded from the record-of-rights."

There were three main classes of under-*ryots* or subtenants and the tenures held by them were: "(a) holdings in which occupancy right accrued by custom. The majority of such holdings consist of only the homestead plot of the under-*raiyat*, (b) holdings which are protected, by virtue of section 48C of the Bengal Tenancy Act, from sale on the ground that they had been in occupation of the under-*raiyat* for more than 12 continuous years and (c) holdings of under-*raiyats* who have a written contract with their landlords by virtue of which their rents are permanent and unalterable."[26] The total number of holdings under all classes of under-*ryots* was 99,992 accounting for a total area of 32,662 acres.[27]

The system of paying rent in terms of labour, found in many parts of Bengal and known as *begar*, was also prevalent in some areas of the district. "Certain landless labourers specially belonging to the aboriginal and depressed classes pay no rent for their homestead plots but in lieu thereof render free labour for a number of days in the year. Usually two to four days' labour is given generally at the cultivating season."[28]

Present system of survey, assessment and collection of land-revenue etc.

The West Bengal Estates Acquisition Act (of 1953) came into force in two stages, in April 1955, and in April 1956 with the result that intermediary rights in land ceased to exist. The actual cultivator of the soil was thus brought into direct relation with the State of which they became tenants. In 1955-56 rents were realized for the first time direct from the tenants and the total sum collected was Rs. 35,54,472. It would be interesting to compare the amounts collected in the district by way of land revenue before and after the coming into force of the Estates Acquisition Act. The table below would show that the new arrangements have led to a sharp increase in land revenue collections.[29]

LAND REVENUE DEMANDS AND COLLECTIONS IN HOOGHLY DISTRICT FROM 1951-52 TO 1965-66

Year	Demand (in Rs.)	Collection (in Rs.)
1951-52	11,06,203	8,93,750
1952-53	11,68,022	9,08,641
1953-54	11,83,376	9,69,049
1954-55	11,74,180	4,61,431
1955-56	45,43,209	35,54,472
1956-57	57,70,429	33,28,470
1957-58	69,21,534	42,13,481
1958-59	78,88,843	42,19,910
1959-60	82,77,773	31,63,835
1960-61	98,46,651	55,15,626
1961-62	1,07,65,789	52,37,412
1962-63	1,09,33,658	79,38,788
1963-64	87,31,191	59,64,392
1964-65	98,49,051	65,70,531
1965-66	71,11,519	62,06,151

It will, however, be seen that the rise in the land revenue of the district has not been steady. The fluctuations noticed from year to year from 1955-56 onwards were due to varying amounts of arrears and interests and also because of the differing amounts of miscellaneous dues collected in successive years. The increase in miscellaneous collections took place as a result of the gradually increasing number of *sair* interests taken possession of and settled, as also from royalties for extraction of sand in the district. An itemwise statement showing collections of revenues other than land revenue is given overleaf:[30]

COLLECTION OF REVENUE OTHER THAN LAND REVENUE IN HOOGHLY DISTRICT FROM 1961-62 TO 1965-66

	1961-62 (in Rs.)	1962-63 (in Rs.)	1963-64 (in Rs.)	1964-65 (in Rs.)	1965-66 (in Rs.)
Miscellaneous Collections	1,74,239	1,33,975	5,91,990	3,09,423	1,71,314
Ferries & Fisheries	8,432	9,796	11,983	22,505	44,517
Mutation fees	1,641	486	453	708	682
Collections from *hats* & bazars	12,212	8,255	11,885	14,692	16,523

The changeover from the zemindari system to the ryotwari system of the administration necessitated the setting up of a new administrative machinery. During the last Revisional Settlement operations, the rent, cess etc. of each holding were assessed by the Settlement Department on the basis of the old records of right, court decrees and under section 42 of the West Bengal Estates Acquisition Act, 1953. The Estates Acquisition Department, which came into existence on Baisakh 1, 1362 B.S. (April 15, 1955), now collects the land revenue through its officers and staff. The Additional District Magistrate (E.A.) is in overall charge of the land revenue administration of the district and exercises analogous powers and has concurrent jurisdiction with the Magistrate-Collector of the district in all matters pertaining to land revenues. There are four Subdivisional Land Reforms Officers, one for each of the subdivisions. A subdivision consists of several Land Reforms Circles each of which is placed under a Junior Land Reforms Officer. There are in all 14 circles in the district each of which is divided into several blocks of four or five mauzas apiece. A Tahsildar is entrusted with the task of collecting land revenue in each block directly from the tenants. The Tahsildars are part-time government servants drawing an allowance and commission on actual collections on a graduated scale. Rent is collected by them on the basis of rent rolls prepared from the Record of Rights, finalized during the latest Revisional Settlement operations. Each Tahsildar has either to deposit personally at the district or subdivisional treasury the amounts collected by him or to send it by postal money-order.

LAND REFORMS

The Permanent Settlement of 1793 failed to protect the interest of the cultivators. Furthermore, by the notorious *haftam* and *panjam* regulations (Regulations VII of 1799 and V of 1812), the zemindars were given almost arbitrary powers over their tenants. How the rights of the cultivators came to be gradually recognized through a series of agrarian legislations beginning with Act X of 1859 (which conferred occupancy rights on *ryots* for possession of land for 12 consecutive years) has been discussed earlier in this chapter. The Bengal Tenancy Act of 1885 legislated for the first time not only in favour of the

permanent tenants but other classes of cultivators and share-croppers as well. The West Bengal Estates Acquisition Act of 1953 and the West Bengal Land Reforms Act of 1955 broke new ground by abolishing intermediary interests in land thereby bringing all *ryots* directly under the State. Under these two Acts the ex-intermediaries are permitted to retain up to 25 acres of agricultural and 15 acres of non-agricultural lands in their *khas* possession for which the rate of rent is the same as is paid by *ryots* for similar lands in the neighbourhood. The lands held by ex-intermediaries in excess of these ceilings have vested in the State for distribution among landless labourers and cultivators with uneconomic holdings. The procedure for such distribution is governed by the West Bengal Land Reforms Act of 1955.

Up to February 1966, about 12,000 acres of land, both agricultural and non-agricultural, vested in the State of which 3,000 acres of agricultural, 3,700 acres of non-agricultural, and 1,600 acres of other kinds of land (*sashan*, *gochar*, *bhagar* etc.) have been taken possession of under the Estates Acquisition Act and approximately 1,500 acres of agricultural lands have been allotted to cultivators on a year to year basis.[31] The Bhoodan movement has made no progress in the district.

An account of the level of rural wages and the economic condition of agricultural labour in the district has been given in Chapter VIII on Economic Trends and Miscellaneous Occupation which need not be repeated here. Suffice it to say that although rural wages have increased in comparison with those prevailing in the pre-vesting period (i.e. before 1955-56), they have failed to keep pace with the ever increasing cost of living.

Up to February 15, 1966, all vested estates in the district were not assessed for final compensation by the Settlement Department which had prepared, by then, 25,890 compensation assessment rolls. By the same date, 4,244 ex-intermediaries had received their compensations in full and 5,943 ex-intermediaries and 291 deities (holding *debottar* and such other lands) *ad-interim* compensation under the Estates Acquisition Act.[32] The following table shows the amounts paid as compensation to all categories of ex-intermediaries in the district from 1956-57 to 1965-66.[33]

YEARWISE PAYMENT OF COMPENSATION IN HOOGHLY DISTRICT

	Ad-Interim (in Rs.)		Final (in Rs.)		Total (in Rs.)
Year	Ordinary	Debottar	Principal	Interest	
1955-56	1,141	56,835	—	—	57,976
1956-57	1,86,418	1,28,976	—	—	3,15 394
1957-58	4,65,840	2,51,729	—	—	7,17,569
1958-59	9,27,457	1,92,427	—	—	11,19,884

YEARWISE PAYMENT OF COMPENSATION IN HOOGHLY DISTRICT—*contd.*

	Ad-Interim (in Rs.)		Final (in Rs.)		Total (in Rs.)
Year	Ordinary	Debottar	Principal	Interest	
1959-60	8,60,082	2,96,118	—	—	11,56,200
1960-61	7,09,909	2,12,060	—	—	9,21,969
1961-62	7,77,088	2,15,874	29,460	Nil	10,22,422
1962-63	7,96,128	1,79,040	1,80,486	34,675	11,90,329
1963-64	6,62,180	2,84,797	1,29,606	22,995	10,99,572
1964-65	2,72,655	2,07,436	1,56,852	37,003	6,73,946
1965-66	3,97,815	2,45,432	1,85,681	46,691	8,75,619
1966-67	3,50,643	1,91,227	2,27,621	71,846	8,41,337
Total :	64,07,356	24,61,951	9,09,700	2,13,210	99,92,217

OTHER SOURCES OF REVENUE

Under the Bengal Agricultural Income Tax Act of 1944 (which is still in force in West Bengal with suitable adaptations), the total number of assessees in the district for the year 1965-66 was 611 and the total demand and collection for the same year were Rs. 43,340 and Rs. 65,187 (including arrears of previous years) respectively. The collections made during the last five years were as below:[34]

Year	Total collections of Agricultural Income Tax (in Rs.)
1961-62	44,502
1962-63	36,254
1963-64	36,895
1964-65	27,898
1965-66	65,187

Commercial taxes

Taxation on the sale of certain goods was introduced in Bengal in July 1941 under the Bengal Financial (Sales Tax) Act of 1941 which is still in force with suitable adaptations. The West Bengal Sales Tax Act of 1954 has imposed besides a tax on sales of cigarettes. Annual collections made under these two Acts in Hooghly district between 1957-58 and 1965-66 are given below:[35]

Year	Total collections under the B.F.S.T. & W.B.S.T. Acts (in Rs.)
1957-58	7,81,820
1958-59	7,68,431
1959-60	7,84,100
1960-61	9,86,431
1961-62	11,12,720
1962-63	12,85,111
1963-64	11,59,962
1964-65	12,43,641
1965-66	16,69,000 (Approx.)

The Bengal Motor Spirits Sales Taxation Act of 1941 (still in force with adaptations) provides for a levy on retail sales of motor spirits to further the construction of new roads in the State. Collections under it in recent years in the district have been as follows:[36]

Year	Total collections under the B.M.S.S.T. Act (in Rs.)
1957-58	6,94,660
1958-59	8,90,675
1959-60	8,52,606
1960-61	9,33,882
1961-62	10,64,660
1962-63	12,02,639
1963-64	11,03,073
1964-65	10,20,735
1965-66	12,91,000 (Approx.)

The Central Sales Tax Act of 1956 provides for taxes on sale of certain goods in the course of inter-State trade and authorizes each State Government to collect, as the agent of the Government of India, the proceeds (reduced by the cost of collection) except in so far as they represent revenues attributable to Union territories, and retain them. The amounts thus collected in the district are small as would appear from the following table:[37]

Year	Total collections under the C.S.T. Act (in Rs.)
1957-58	7,378
1958-59	23,351
1959-60	24,321
1960-61	22,045
1961-62	35,114
1962-63	51,852
1963-64	82,043
1964-65	76,052
1965-66	1,18,000 (Approx.)

Excise revenue

Next to land revenue, the most important source of revenue in the district has always been excise. In O'Malley's time (1912), the manufacture and sale of country spirits were "carried on under what is known as the contract supply system, which was introduced in 1907-08. Under this system, the local manufacture of country spirit is prohibited, and contracts are made with firms of distillers for its supply. The contractors are forbidden to hold any retail licences for

the sale of the spirit. The spirit is brought by them to the various depots, and is there blended and reduced to certain fixed strengths, at which alone it may be supplied to retail vendors and sold by the latter to consumers."[38] The collections made on the sale of opium, hemp, *tari* and foreign liquors made up, at that time, the rest of the excise revenue. This system is still in operation except for the fact that sale of foreign liquors has since increased boosting revenues earned on that account. The State Government licensed in June 1956 a distillery at Serampore besides the big one existing at Konnagar since July 1906.

An interesting account has been given by Toynbee of the revenues derived from the manufacture and sale of salt in the district since the acquisition of the *Dewani* by the East India Company in 1765, when it enjoyed a monopoly in the salt business, up to 1836 when Government control over the supply of the commodity was finally abolished.[39]

Excise revenues collected in the district during the past five years were as below:[40]

Year	Total collections (in Rs.)
1961-62	46,71,747
1962-63	54,22,406
1963-64	73,29,996
1964-65	88,02,488
1965-66	1,09,59,274

The item-wise break-up of the above revenue earnings is shown in the following table:[41]

EXCISE REVENUE COLLECTED IN HOOGHLY DISTRICT FROM VARIOUS SOURCES FROM 1961-62 TO 1965-66

Source	1961-62 (in Rs.)	1962-63 (in Rs.)	1963-64 (in Rs.)	1964-65 (in Rs.)	1965-66 (in Rs.)
Country spirits	9,48,782	10,90,680	15,50,957	21,52,831	26,30,348
Country fermented liquors (*Pachwai*)	3,01,701	2,93,276	2,94,559	4,49,311	3,05,940
Toddy	4,09,023	4,55,537	4,69,829	4,93,713	4,48,330
Malt liquor (beer)	24,149	30,101	34,225	37,989	43,709
Wines & spirits	16,94,037	24,83,862	36,98,623	38,94,307	44,74,558
Commercial spirits	9,78,102	7,91,270	8,64,019	11,81,769	25,31,680
Opium	49,306	43,622	46,989	49,743	47,248
Hemp & other drugs	1,45,573	97,419	1,87,182	3,25,365	2,54,548
Bhang	39,687	38,572	42,574	45,114	49,680
Fines, confiscations etc.	46,467	59,483	66,969	87,868	87,365
Payments for services	35,270	39,914	79,419	90,310	86,958
Others	491	717	714	830	601

Income-Tax

In 1965-66, the number of income-tax assessees in the district was 8,225, the total revenue demand Rs. 14,43,000 and the total collections (including arrears of previous years) Rs. 32,55,000.[42]

NOTES

1 L. S. S. O'Malley and M. Chakravarti—Bengal District Gazetteers: Hooghly. Calcutta, 1912. p. 206.
2 loc. cit.
3 ibid. pp. 206-7.
4 ibid. p. 209.
5 loc. cit.
6 loc. cit.
7 ibid. p. 210.
8 loc. cit.
9 Quoted by O'Malley, loc. cit.
10 ibid. pp. 211-2.
11 ibid. p. 212.
12 ibid. pp. 212-5.
13 George Toynbee—A Sketch of the Administration of the Hooghly District. Calcutta, 1888. p. 69.
14 ibid. pp. 68-9.
15 ibid. p. 64.
16 ibid. p. 65.
17 ibid. pp. 73-9.
18 S. N. Ray—Final Report on the Survey and Settlement Operations in the District of Hooghly, 1930-1937. Calcutta, 1942. pp. 26-7.
19-20 ibid. pp. 29-30.
21 ibid. p. 31.
22 loc. cit.
23 ibid. p. 27.
24 ibid. p. 31.
25 ibid. pp. 28-9.
26 ibid. p. 32.
27 loc. cit.
28 ibid. p. 29.
29 Source: District Magistrate, Hooghly.
30 Source: District Magistrate, Hooghly. These are the principal sources of revenue, other items being less important.
31-32 Source: Collector of Hooghly.
33 Source: Secretary, Board of Revenue, West Bengal.
34 Source: Commissioner, Agricultural Income Tax, West Bengal.
35-37 Source: Commissioner of Commercial Taxes, West Bengal.
38 L. S. S. O'Malley—op. cit. p. 217.
39 G. Toynbee—op. cit. pp. 85-6.
40-41 Source: District Magistrate, Hooghly.
42 Source: Income Tax Commissioner, West Bengal (Range I).

CHAPTER XI

LAW ORDER AND JUSTICE

INCIDENCE OF CRIME

The principles of governance upheld by a State largely find expression in the laws codified and enforced by it, the violation of which constitutes crime. When a State lays down certain social norms and restricts, through its laws, individual and group behaviour, the resultant stresses not only generate a tendency for abatement of crimes but paradoxically produces at the same time a set of maladjustments on the social plane as more and more fields of life are brought under the coercive purview of the State. The situation becomes all the more piquant in a growing society where new dimensions in various spheres are found and reached in quick succession. An analysis of the incidence of crime in a society should, therefore, take into account the size of the territory and its population as also the time factor and the rate of growth of its economy. Although Hooghly is neither the largest nor the most populous district in West Bengal, its importance is great because of its heavy industrial concentration. Any comparative study between crime-incidences in the various districts of West Bengal is bound to go awry since sufficient mathematical certainty cannot be reached for attaching weighted means to territorially vast districts like 24-Parganas, Midnapur and Burdwan or densely populated areas like Calcutta and Howrah. The incidence of crime in the Hooghly district cannot, therefore, be precisely correlated with the overall crime figures of the State for arriving at a deductibly sound basis as to the position of the district in the crime-map of West Bengal. But keeping all these factors in view and contrasting 5-year averages of crime figures of the district with those of the State, an approximate comparison may be attempted.

The following table[1] provides crime statistics of the district (under different categories) for the 5-year period between 1961 and 1965.

Year	Dacoity	Burglary	Theft (excluding cattle theft)	Cattle theft	Murder	Sex crimes	Enforcement crimes
1961	46	841	1,639	16	23	42	234
1962	42	978	1,797	32	31	75	97
1963	73	1,099	1,753	35	22	98	365
1964	42	1,132	1,782	38	27	61	476
1965	39	1,084	1,602	32	28	46	1,370

In 1961 Hooghly had only 6.3 per cent of the total population of the State. In this context, a comparison between the incidence of crime in this district and the whole of West Bengal may prove interesting. On the basis of 5-year averages (1961-1965), Hooghly district compares with the State's totals in the following manner: in dacoity 8.24 per cent, in theft 8.79 per cent, in burglary 10.05 per cent, in cattle theft 3.88 per cent, in murder 5.7 per cent and in sex crimes 4.37 per cent. Taking all the above categories of crimes together, the district's share, over the identical period of 5 years, was 8.81 per cent of the total incidence of crime in the State. A noteworthy feature is that sex crimes in the district (this includes figures for rape, abduction, kidnapping, unnatural offences and outraging of modesty), although fairly frequent intrinsically, are actually less than the State average while murders, although relatively infrequent, are more than the average for West Bengal.

For the district alone, theft is obviously the most common crime, the next being burglary. About 49.56 per cent of all crimes committed in the district during the 5-year period under review related to theft while burglary accounted for 29.68 per cent. The district percentages for other types of crimes were Enforcement offences 15.85%, sex crimes 1.86%, dacoity 1.4%, cattle theft 0.89% and murder 0.76%. An interesting feature is that while almost half the total working population of the district was engaged in agricultural activities, theft of cattle, which is primarily an agricultural asset, was of negligible consequence. Cases of burglary, theft, cattle theft and murder appear to have kept close to an average mean during these five years. Sudden jumps were noticeable only in respect of dacoity, sex crimes and Enforcement offences.

Thanawise incidence of crime

If the 5-year crime figures of the district are broken up against each police station, the following table[2] emerges:

Name of Thana	Dacoity	Burglary	Theft (excluding cattle theft)	Cattle theft	Murder	Sex crimes	Enforcement crimes
Chinsura	2	672	1 263	12	10	24	236
Dhaniakhali	24	285	607	7	6	11	42
Magra	6	351	570	14	7	21	73
Pandua	17	212	481	6	13	25	114
Polba	17	186	333	3	9	6	49
Balagarh	8	175	241	3	4	23	85
Serampore	6	746	1,251	10	21	69	707
Uttarpara	1	519	814	6	3	39	648
Jangipara	24	180	163	6	5	27	71

Name of Thana	Dacoity	Burg-lary	Theft (exclud-ing cattle theft)	Cattle theft	Mur-der	Sex crimes	Enforce-ment crimes
Chanditala	16	241	413	5	5	4	112
Chandernagore	—	231	629	3	3	3	102
Bhadreswar	2	190	370	14	5	—	80
Haripal	9	209	214	9	9	6	17
Singur	11	195	254	10	3	25	78
Tarakeswar	17	188	315	18	2	32	86
Arambagh	21	206	270	15	6	4	121
Goghat	37	127	123	7	8	1	33
Khanakul	16	130	132	5	10	1	69
Pursura	8	91	130	—	2	1	19

Comparatively, Serampore P.S. has the heaviest incidence of crime followed by Chinsura, Uttarpara, Magra and Dhaniakhali, in that order, while the lowest incidence is in the Pursura police station with Goghat, Khanakul and Haripal returning analogous figures. Theft, the most common offence in the district, appears to be much more frequent in the two police stations of Chinsura and Serampore. On the other hand, group-crimes like dacoity, which can thrive more in outlying areas, are worst in police stations like Goghat, Jangipara, Dhaniakhali and Arambagh. Burglary, murder and sex crimes show a tendency of being urban offences and are relatively most frequent in Serampore, Uttarpara and Chinsura thanas. Cattle theft, although an essentially rural offence, occurs mostly in the outlying thanas of Tarakeswar and Arambagh—and paradoxically—in the urban police stations of Chinsura and Magra as well.

Enforcement crimes

With the increasing involvement on the part of the State in the production, transportation and distribution of foodstuffs and other essential commodities, a number of new laws have been promulgated in course of the last decade or so, e.g., the Essential Commodities Act of 1955, the West Bengal Rice and Paddy Control Order of 1957, the West Bengal Rationing Order of 1964, the Calcutta Industrial (Extended) Area Regulation of 1964 etc. These do not fall within the main crime statute, the Indian Penal Code, but their infringement is no less significant to the society. The incidence of this new type of offences is on the increase in view of the fact that this State as a whole is experiencing of late a comparative shortage in edibles. In fact, breaches of the peace over the food issue was reported from the district a number of times around the middle of 1966.

Excise crimes

There is another sphere where crimes are increasingly becoming socially significant. Violation of the provisions of Bengal Excise Act,

1909 not only reduces the collection of State revenues but is also an offence against certain existing norms of social behaviour. Below is a table[3] showing the incidence of excise offences in the district between 1961 and 1965.

Year	Cases Apprehended	Cases Convicted
1961	2,815	2,199
1962	3,200	2,602
1963	3,597	2,946
1964	3,842	3,189
1965	4,220	3,370

The upward trend in both apprehension and conviction is remarkable. From an apprehension figure of 2,815 in 1961, it jumped up in only four years to 4,220; correspondingly the conviction figures rose from 2,199 to 3,370. The apprehension-conviction ratio appears to have kept to a steady level; while in 1961 it was 78.11 per cent, in 1965 it stood at 79.85 per cent. The incidence of this type of crime is better understood if the figures are broken down to the thana level. The following table[4] prepared on the basis of data covering the 5-year period between 1961 and 1965 reveals comparative incidence of excise offences in the various thanas of the district.

Thana	Cases Apprehended	Cases Convicted
Chinsura	1,760	1,460
Magra	395	250
Pandua	617	318
Polba	165	118
Dhaniakhali	742	695
Balagarh	49	47
Chandernagore	994	838
Singur	1,078	752
Haripal	943	749
Tarakeswar	994	816
Bhadreswar	3,346	2,633
Serampore	3,315	2,655
Uttarpara	1,413	1,210
Chanditala	1,010	825
Jangipara	127	95
Arambagh	270	219
Goghat	205	295
Khanakul	211	191
Pursura	40	40

The table pin-points Bhadreswar and Serampore police stations as the run-away leaders in this respect with 3,346 and 3,315 apprehensions (18.9% and 18.8% of the district totals) and 2,633 and 2,655 convictions (18.3% and 18.4% of the district totals) during the period under review. The next police station is Chinsura with 1,760 apprehensions and 1,460 convictions. It is also seen that although Serampore is just a little short of Bhadreswar in apprehension, its conviction figure is slightly higher. Against the district's average apprehension-conviction ratio at 80.94 per cent, Serampore claims 80.09 and Bhadreswar 78.69 per cent. In this respect Chinsura returns a still better figure with 82.95 per cent. The least affected among the police stations is Pursura with only 40 cases of apprehension and an identical number of convictions bringing the percentage to the optimum. From these thanawise statistics a broad conclusion may be drawn that excise offences occur mostly in the urban areas of the district. The three police stations with the highest incidence are the three leading municipal towns, Serampore, Bhadreswar and Chinsura being followed by Singur and Chanditala which are not far away.

It has already been pointed out that offences under the Bengal Excise Act, 1909 not only militate against morals but also hit the State exchequer. A glimpse of the State's excise earning from the district may be had from the following table:[5]

Year	From Excise duty (Rs.)	From Court fines in Excise cases (Rs.)	From other Excise sources (Rs.)
1961	46,71,255.72	47,706	13,455
1962	54,21,688.95	56,605	18,644
1963	73,29,282.74	68,285	23,471
1964	88,01,658.43	76,475	26,083
1965	1,09,58,673.25	79,137	31,288

Here also the gradual increase is strikingly apparent.

Prosecutions and convictions

No discussion on the incidence of crime is complete without the apprehension figures being reviewed against conviction statistics. Under the Rule of Law, to which the judicial system of this country is wedded, no person can be deemed to have committed an offence unless so found by due process of law. The following table[6] brings out this aspect of the matter.

	Cases lodged with Police		Cases prosecuted by Police		Cases convicted by Courts	
Year	G.R.	Non-G.R.	G.R.	Non-G.R.	G.R.	Non-G.R.
1961	1,686	1,832	716	1,832	342	1,763
1962	2,029	2,249	881	2,249	390	2,137
1963	2,391	2,956	957	2,956	335	2,789
1964	2,293	1,979	771	1,979	383	1,797
1965	1,838	2,123	635	2,123	283	1,921

G.R. cases include those where police, by themselves, can take cognizance and arrest without warrant. The rest of police prosecutions constitute non-G.R. cases comprising prosecution report cases, certain summons procedure cases and the like. It should be pointed out that the above figures, although shown as pertaining to one year, may not strictly correspond to that particular year; there are always spill-overs from previous years which are carried over to the next. But it can be reasonably hoped that a 5-year average will adjust itself at both ends and present a near-correct picture. The average number of cases lodged with the district police in a year during this 5-year period stood at 4,275.2 In 1961, it was somewhat less than the average; in 1963 it was more but in 1965 it climbed down. Analogously, the number of cases prosecuted by the police in a year stood at an average of 2,817.18 and that of cases convicted by the appropriate courts at 2,441.2. Here also the upward trend is manifest in 1963 followed by a slump in 1965. It is noticed that although on an average only 65.9 per cent of the cases lodged with the police are actually brought before the courts after investigation, the ratio between police prosecutions and convictions is as high as 86.6 per cent. But this high percentage is apt to be misleading if we do not examine in isolation the G.R. cases alone which provide a dependable yardstick for measuring the quality of police administration in the district. G.R. cases are those where police can take direct action under the Criminal Procedure Code and after investigation lodge chargesheets before the appropriate courts upon which the latter may take cognizance. In this restricted but very significant field, while an average of 2,047.4 cases are being lodged with the police per year, only 792 cases are annually prosecuted by them of which only 359.2 end in convictions. Here the comparative percentages are far less; only 38.7 per cent of the cases lodged with the police are prosecuted and of the latter the prosecution wins only in 45.4 per cent cases. Therefore, a fairly wide gap exists between the number of cases lodged, prosecuted, and convicted in this criminologically significant part of the generic statistics.

It will not be out of place here to dwell upon the crime statistics of the district from a historical angle. In 1866 and 1867, 2,389 and 2,177 cognizable cases respectively were lodged with the police. In the former year the number of non-cognizable cases was 2,139 and in the latter 2,393.[7] In 1965, the cognizable and non-cognizable cases brought to the district police numbered 1,838 and 2,123 respectively. It has already been explained that non-cognizable cases do not bear so much of criminological significance to the society as do the cognizable ones. Therefore, a noticeable decline in the number of cognizable cases against the background of a phenomenal growth in population and economy may easily be called satisfactory. But the district in 1866-67 and during the five years under review did not comprise

identical territories. The figures quoted in the Report on Administration of Bengal for the year 1872-73 will, therefore, be more useful for this purpose as the district had, by then, assumed its present dimensions. In 1872-73[8] the district population stood at 8,92,691 which multiplied to 22,31,418 in 1961. In the background of this population explosion the crime statistics of the two remote periods are contrasted in the followig two tables:

TABLE I

Years	Population	Cases lodged with police	Cases prosecuted by police	Cases convicted	% of Col. 1 to 2	% of Col. 1 to 3	% of Col. 1 to 4
		Annual average	Annual average	Annual average			
	1	2	3	4			
A 1872-73	8.92,691	2,130	1,288	425	.24	.14	.05
B 1961-65	22,31,418 (in 1961)	4,275	2,818	2,441	.2	.13	.11

TABLE II

	Percentage Variations Between			
	1A and 1B	2A and 2B	3A and 3B	4A and 4B
A 1872-73	—	—	—	—
B 1961-65	+150.0	+100.7	+118.8	+474.4

These tables set against each other the crime characteristics of two widely divergent societies separated by about nine decades or three generations of people—one a politically decadent community at the threshold of colonial domination and the other a free people with political sovereignty and considerable economic growth. It is significant to note that the percentage increase in the institution and prosecution figures is substantially less than the percentage increase in population while the conviction figures show a nearly five-fold increase. This may reasonably be attributed to sober and uniform methods of law enforcement and the dispensation of justice by a standardized magistracy and judiciary helped by a better-equipped bar.

Industrial unrest

Admittedly, this is an item of discussion which should and has indeed been included in the chapter on Industries. But a brief reference to this issue in the present context is relevant inasmuch as any industrial unrest carries in itself a potentiality towards a strained law and order situation. This broad statement is all the more meaningful in the case of the Hooghly district as almost half of its working popula-

tion is engaged in industrial occupations and the area forms one of the most important industrial belts of the State. Within the district function as many as 55 registered trade unions belonging to different types of industries with memberships ranging from 4,468 in the case of the Dunlop Rubber Factory Labour Union, Shahaganj to 22 in the Ananta Dyeing & Printing Workers' Union, Serampore. In 1961 there were 29 reported cases of industrial dispute in the district resulting in the loss of 1,91,247 man-days, in 1962 12 cases were reported with loss of 89,308 man-days, in 1963 the corresponding figures were 22 and 44,029, in 1964 they were 22 and 3,29,240 and in 1965, 29 and 3,28,868 respectively.[9]

During the year 1966 (when the present Gazetteer is being written), an industrial dispute erupted in the Angus Jute Mill where a large number of workers demonstrated and surrounded the administrative office of the factory demanding certain remuneration benefits. Instances of manhandling of officers were reported and police help was called for. It appears that the police had to resort to lathi-charge and teargassing when fire broke out in a particular section of the factory. We have only mentioned the number of industrial disputes occurring in the preceding years between 1961 and 1965 without trying to describe any incident in particular. But instances have not been rare when industrial disputes like the one mentioned above boiled over to create situations which disrupted the normal law and order in the district. This point is being emphasized only to substantiate the earlier proposition that incidence of crime in a district is not only related to its population and territory but is as much an outcome of its industrial complex and economic network.

Organization of the Police Forces

History

For a considerable period even after the commencement of the British rule in India, the idea of a regular police force charged solely with the tasks of prevention and detection of crimes did not materialize into a separate administrative apparatus. Founded as it was on the Quranic law, the erstwhile Mughal Government continued the Islamic institution of policing through Muhtasibs whose duty was to prevent breach of law and act as censors of morals. Later, "the institution of mir'adl, the establishment of regulations under Akbar and the formation of a code of judicial decrees under Aurangzeb all tended to reduce the area of discretion exercisable through the ecclesiastical office of the qazi."[10] In the administration of the police the duties of the Muhtasibs were similarly restricted and most of their powers were delegated to the Kotwals, a secular functionary responsible for peace in the cities and towns. While the Kotwals did their policing in towns and cities, general preservation of law and order was the responsibility of the Faujdars who represented the executive authority of Government within the limits of their respective '*Sarkars*'. The police administration of the Mughals were essentially of a

military character and the Faujdars maintained a contingent of sepoys whose strength varied from 500 to 1,500.[11] Inferior officers called Thanadars were appointed for every thana under the control of local Shikdars who were in their turn subordinate to the Faujdars. The Thanadars were assisted by a small number of 'burkandazes' or armed guards.

In addition to the ruler-appointed officers of police, there existed the early Hindu institution of village watchmen who guarded the person and property of the people and received in return certain grants of land or shares of produce for their subsistence.[12] The village watchmen were mainly of two classes; the first consisting of Dushadhs, Pasbans, Nigahbans, Goraits, Harees and such others who were the descendants of the ancient hereditary watchmen acting under the authority of the head of the village while the second comprised Paiks or Chowkidars. Their duty was almost exclusively confined to apprehension of offenders and prevention of breach of peace.

From the account left behind by Seid Gholam Hossein Khan in his Seir Mutaqherin[13] it is found that among the places where Faujdars were appointed Hooghly was one. This system probably worked well so long as the central administrative machinery was strong and effective. Both the Faujdari and Zemindari police worked in harmony and in the exercise of police duties the Zemindars appear to have been subordinate to the Faujdar who was in charge of 'pergunnah' comprising many zemindaries.[14] With the decline of the Mughal empire, the Zemindars tried to be independent of the Faujdars and things came to such a pass that by 1773 far from maintaining peace and order in their localities the zemindars themselves "too frequently protected the criminals."[15] The Nawab's police force was already reduced to insignificance, and earlier, in 1770 the Faujdars were recalled except from those districts which were adjacent to the factories of European powers other than the British.

"When Hastings was put in charge of police administration, the country was practically in a state of chaos and confusion."[16] In 1774 Hastings proposed that Faujdars should be appointed at certain stations including Hooghly "for the protection of the inhabitants, for the detection and apprehension of public robbers within their respective districts, and for transmitting constant intelligence of all matters relating to the peace of the country to the Presidency."[17] In 1776 Reza Khan's plan for a better police administration was adopted providing for a *Faujdari thana* at the chief towns of every large district. In districts having larger jurisdictions *chowkis* or inferior police stations were established in the outlying areas. Under the new plan 26 *thanas* and 24 *chowkis* sprang up, Hooghly being one of the thanas. "Over and above these *Faujdari thanas*, there were *Zemindari thanas* in every Zemindary, each of which was under a thanadar, appointed by and responsible to the Zemindar."[18] For certain thanas

like Hooghly there was provision for assistance by the Company's forces during an emergency. In 1781-82, it was realized that co-operation between the Faujdars and Thanadars was not of the desired order and finally the *Faujdari* establishments were annulled except in certain very important places including Hooghly where the Faujdars held special nature of offices.[19]

In December, 1792, a Regulation was proclaimed by which the police of the country was placed under the exclusive charge of Government officers specially appointed for that purpose. The landholders and farmers were prohibited from maintaining such establishments and were relieved of their police duties. The Magistrates were directed to divide their districts into police jurisdictions with areas not exceeding 20 miles square and to place each of them under the charge of a Darogah who was to be on the Government pay roll. Under the Darogah village watchmen of the nature of Paiks, Chowkidars, Pasbans, Dushadhs etc. were appointed. But strangely enough, the powers of appointment and removal of such employees were left with the landholders.[20]

A faithful and reliable account of the working of an average police station in 1837 can be had from the writings of Frederick John Shore, a contemporary District and Sessions Judge. It appears that an average police station in 1837 had one Darogah, one Writer, one Jamadar and about 12 Barkandajs. Its jurisdiction was approximately 250 sq. miles or more.[21] In 1838, a Committee appointed for reformation of the police in Bengal, pointed out that the worst defects of the existing system were the union of executive and judicial functions in the same body and its centralized administration and suggested that there should be a separate police force under a Superintendent and an Assistant Superintendent in each district. The recommendation of the Committee regarding separation of judicial and executive functions was accepted, but it took nearly a quarter of a century to implement its second suggestion. In 1860, another Commission appointed with the same task, recommended that the police under each local Government should constitute a unified force under an Inspector General of Police and in each district there should be one "European" Superintendent of police, departmentally subordinate to the Inspector-General of Police but locally placed under the Magistrate of the district. On the Superintendent was to devolve the direct command and control of all establishments of police in the district under the general administrative and judicial control of the District Magistrate.[22] It also called for detailed and faithful record-keeping at every stage of investigation. On the basis of these recommendations, Act V of 1861 was passed. "The structure of the police organisation that was laid down in 1861 is substantially the same today."[23]

Present police personnel

At present, the Hooghly district police force under the Superintendent of Police, who is assisted by one Additional Superintendent

of Police and two Deputy Superintendents of Police at Sadar and three Subdivisional Police Officers at Chandernagore, Serampore and Arambagh subdivisions, consists of 18 Inspectors, 144 Sub-Inspectors, 156 Assistant Sub-Inspectors and 2,198 constables. Of the 18 Inspectors, seven are in charge of Circles, one for the Sadar 'A' circle comprising Chinsura, Polba, Dadpur and Dhaniakhali police stations, one for the Sadar 'B' circle consisting of Magra, Pandua and Balagarh police stations, one for the Chandernagore Circle with Chandernagore and Bhadreswar police stations, another for the Tarakeswar Circle covering Singur and Haripal thanas, another for the Arambagh Circle composed of Arambagh, Goghat, Khanakul and Pursura police stations, one for the Serampore Circle comprising Serampore P.S. alone and the last for the Uttarpara Circle encompassing Uttarpara, Chanditala and Jangipara police stations. The 11 other Inspectors are posted as follows: two for the District Armed Police Branch, one at Headquarters and the other at Serampore; two as Court Inspectors at Chinsura and Serampore; two in the District Intelligence Branch at Chinsura and Serampore; one as the Town Police Inspector posted at Chandernagore; two in the District Enforcement Branch at Chinsura; one at Chinsura for cordoning work and another at Chinsura as the Senior Adjutant and Quartermaster of the Home Guards.

The other police personnel of the district (Sub-Inspectors, Assistant Sub-Inspectors and constables) attached to various thanas are shown in the following table:[24]

Police Station	S.I.	A.S.I.	Cons-table	Remarks
Chinsura	47	31	952	This includes D.A.P., P.S., T.O.Ps, Court, Cordoning, O.R., M.T. Section etc.
Magra	6	8	120	This includes P.S., T.O.Ps & Cordoning.
Pandua	2	3	12	
Polba	1	2	10	
Dadpur	1	1	8	
Dhaniakhali	2	4	18	
Balagarh	2	2	16	
Chandernagore	11	18	196	This includes P.S , T.O.Ps, Court, D.A.P. and Traffic, Cordoning etc.
Singur	4	3	16	This includes Singur Excise Officers.
Haripal	2	2	12	
Tarakeswar	2	2	10	

Police Station	S.I.	A.S.I,	Constable	Remarks
Bhadreswar	6	5	115	This includes P.S., T.O.Ps & Cordoning.
Serampore	21	19	353	This includes P.S., D.A.P., T.O.Ps, Court, Cordoning, Traffic etc.
Uttarpara	10	11	118	This includes P.S., T.O.Ps and Cordoning.
Chanditala	3	2	12	
Jangipara	2	2	10	
Goghat	2	3	26	
Khanakul	2	2	16	
Arambagh	4	7	55	This includes P.S., T.O.Ps, Court etc.
Pursura	1	1	8	

Next to the district headquarters, the strongest police contingent is stationed at Serampore, followed by Chandernagore and Uttarpara. Uttarpara and Serampore being fairly near and within the same subdivision, their combined police strength indicates the importance of this industrial belt from the law and order point of view.

An interesting study is made in the following table which shows the correlation between the growth of population in the district and the corresponding increase in the police personnel over the last one hundred years.

Year	Area in sq. miles (1)	Population (2)	No. of Police personnel (3)	Ratio between 1 & 3	Ratio between 2 & 3	Percentage variations between		
						1A & 1B	2A & 2B	3A & 3B
A 1863-64[85]	2,000	16,00,000	771	1:2.59 sq. m.	1:2,075.23 persons	—	—	—
B 1964-65[86]	1,212.1	22,31,418	2,498	1:0.49	1:893.28 persons	−39.4	+ 39.46	+324

Over the century under review, the district underwent a very sizeable reduction in area accompanied by a considerable increase in its population but the rate of increase in its police personnel completely outstripped even the phenomenal growth in population. While in 1863-64 there was only one policeman per 2.59 sq. miles of territory and for every 2,075.23 persons, in 1964-65 one policeman was employed to look after not more than 0.49 sq. miles of territory and 893.28 persons.

It should, however, be conceded that the above comparison really deals with, in part, two territorially dissimilar units, although

for criminal administration, a separate Howrah district had been formed as early as February, 1843.[27] According to Shri A. Mitra, "the (Hooghly) district assumed more or less its present boundaries in 1879 when the Arambagh subdivision was finally delimited."[28] It would, therefore, be more appropriate to contrast these figures over a shorter period of 80 years, say, between 1886 and 1966. In 1886 the district had a population of 10,12,768 and an area of 1,223 sq. miles.[29] The police force then consisted of 84 officers and 369 men giving the ratio of 1:1.5 as between the police personnel and the area of the district and 1:1,322 as between the police force and the district population. Correspondingly, in 1966 the total number of police officers stood at 325 and men at 2,198.[30] There had been, therefore, an increase of 67.07 per cent in the ranks of officers and 69.92 per cent in those of men during the intervening 80 years. This point is sociologically very interesting as it removes a smug prevalent idea that police administration has become top-heavy in recent times. Each policeman in the district, as has been stated already, had to superintend 0.49 sq. miles of territory and to look after 893.28 persons in 1966.

Enforcement Branch

There is a separate establishment under the Superintendent of Police to deal with enforcement offences. This force consists of 2 Inspectors, 10 Sub-Inspectors, 1 Assistant Sub-Inspector and 10 constables.

Intelligence Branch

The Intelligence Branch forms yet another separate establishment under the S.P. with 2 Inspectors, 13 Sub-Inspectors, 12 Assistant Sub-Inspectors and 62 constables.

Railway Police

The Superintendent of Police is also *ex officio* Additional Superintendent of Railway Police and commands the G.R.P. forces employed for the enforcement of the provisions of the Indian Railways Act of 1890 over railway premises as defined in the Act and falling within the district. The G.R.P. stations are at Bandel and Sheorafuli. At Bandel there are 1 Sub-Inspector, 2 Assistant Sub-Inspectors and 20 constables; the Sheorafuli G.R.P. station consists of 1 Sub-Inspector, 1 Assistant Sub-Inspector and 23 constables.

National Volunteer Force

Besides the regular police set-up there are semi-official organizations with analogous objectives like the National Volunteer Force, the Home Guards etc., the personnel of which are recruited from the local people who volunteer their services on a part time basis. Such supplementary organizations are not exactly of recent innovation. Towards the latter part of the 19th century, a special group of town police, not subject to the service conditions of the regular police, was a frequent feature in the districts. At times of crisis local people were recruited for temporary periods and deployed as separate units to assist the regular police in dealing with the emergency. The National Volunteer Force, although an organization based on temporary recruitments, forms more or less a permanent second line of reserve

to be utilized when the regular force is overworked due to any sudden increase in their duties. The N.V.F. is organized in one district battalion and it has been reported that the force was employed very successfully during difficult times. When a national emergency was declared in 1965, 77 N.V.F. personnel were called up for helping the regular police for a period of approximately six months (4.9.65 to 28.2.66). Again, when the system of rationing and its concomitant measure, district cordoning; were introduced in the latter part of 1965, 102 of them were engaged for anti-smuggling and inter-district cordoning duties. Moreover, between 27.1.66 and 11.4.66, 23 N.V.F. personnel were deployed for a drive for loan collection as a revenue earning measure.

Home Guards

The Home Guards organization is of comparatively recent origin and was introduced immediately after the attack on the northern borders of our country in October, 1962. In Hooghly its date of establishment was November 2, 1962. Under the overall supervision of the Superintendent of Police this organization has a District Commandant as its leader and one officer from the regular police force with the rank of Inspector as its Senior Adjutant and Quartermaster. The main division in the organization is between its Urban and Rural wings, the Urban ones consisting of 5 Commands and 3 Groups and the Rural 6 Commands and 14 Groups. The Urban Commands are at Chinsura, Tribeni, Chandernagore, Serampore and Uttarpara and the Urban Groups are at Magra, Chandernagore and Bhadreswar. The Rural Commands are at Tribeni, Chinsura, Arambagh, Chandernagore, Serampore and Uttarpara looking after the Rural Groups at Balagarh and Pandua: Polba; Dadpur and Dhaniakhali; Arambagh, Goghat, Pursura and Khanakul; Tarakeswar, Haripal and Singur; Jangipara; and Chanditala respectively. There is a total provision for 1,870 personnel in the rural and 2,420 in the urban divisions of the Home Guards. An official programme for training them up is being implemented and the following table shows the progress[21] made up to June 25, 1966.

Group	Trained		Under Training	
	Rural	Urban	Rural	Urban
Chinsura	—	128	2	20
Balagarh	78	—	—	—
Magra	—	140	—	15
Pandua	98	—	40	—
Polba	35	—	—	—
Dadpur	25	—	—	—
Dhaniakhali	30	—	30	—

Group	Trained		Under Training	
	Rural	Urban	Rural	Urban
Chandernagore	—	41	—	15
Bhadreswar	—	205	—	20
Singur	35	—	15	—
Haripal	80	—	—	—
Tarakeswar	31	—	—	—
Serampore	—	194	—	25
Uttarpara	—	128	—	25
Chanditala	19	—	20	—
Jangipara	35	—	—	—
Arambagh	20	—	—	—
Goghat	17	—	—	—
Khanakul	28	—	30	—
Pursura	11	—	—	—

The Home Guards were deployed for 67 days in 1965 for various assignments in the district, the details of which are given in the following table.

Occasion	No. called up	Period (in days)
Saraswati Immersion ceremony	56	1
Durga Puja	75	4
Ratha Jatra	93	2
Jagaddhatri Puja	37	4
Kartik Puja	31	1
Ghost ration card checking	105	6
Railway track guarding duty	181	16
Anti-smuggling duty in connexion with cordoning	140	32
Hartal duty	96	1

The chart outlines the character and efficacy of the Home Guards organization of the district.

Excise administration

There is a separate establishment under the Collector for the enforcement of the provisions of the Bengal Excise Act of 1909. While the Collector is assisted in this behalf by the Additional District Collector, the immediate charge of excise administration rests with a Superintendent of Excise having jurisdiction over the entire district. The personnel consists of 5 Inspectors of Excise, 3 of them having

jurisdiction over Sadar, Serampore and Arambagh ranges and the other 2 being Distillery Officers at Serampore and Bhadrakali distilleries. There are 22 Sub-Inspectors of Excise with the following work distribution: one each for Sadar, Pandua, Serampore, Chanditala, Haripal, Chandernagore, Dhaniakhali, Arambagh and Khanakul circles, 2 for Serampore and Bhadrakali distilleries and 1 heading a special party at Singur and the other looking after the tree taxes of the district. In addition, there are 14 Assistant Sub-Inspectors, one each in Sadar, Pandua, Chinsura, Serampore, Chandernagore, Tarakeswar, Dhaniakhali and Khanakul circles, 2 in the Singur special party, 1 in the Jangipara party, 1 in the tree tax section and the other in the Bhadrakali distillery. Of the two excise warehouses in the district, the one at Bandel is looked after exclusively by one Sub-Inspector of Excise while his counterpart posted at Arambagh circle holds simultaneous charge of the warehouse there.

The work load on the excise administration of the district may be assessed from the following table[32] showing the numbers of major excise licensees. their respective jurisdictions and the populations within such jurisdictions:

Name of Circle	Area in sq. miles	Population	No of major licensees
Sadar (Hooghly)	118 53	1,81,003	53
Chandernagore	42.42	1,58,313	47
Pandua	190.10	1,53,485	41
Serampore	33.60	2,06,797	53
Haripal	91.41	1,40,837	19
Chanditala	89.14	1,50,597	35
Tarakeswar	96.96	1,22,858	24
Dhaniakhali	137.47	1,20,085	33
Arambagh	260.30	1,81,811	42
Khanakul	152.20	1,88,605	29
	1,212.13	16,04,391	376

The average consumption of excise stuffs in the district and their value in rupees may help bring out in further details the pressure on the administration. The following table,[33] although pertaining to 1958-59, is nonetheless informative. (These were the latest figures made available by the local authorities).

Name of intoxicant	Quantity consumed	Total value (in Rupees)
Country spirit	17,566.9 L.P. gallons	8,94,522
Ganja	1,600 seers	3,24,608
Bhang	596 ,,	47,680
Opium	286 ,,	2,03,715
Pachwai	11,261 maunds of dry rice fermented	6,14,915
Wines & spirits	1,635 bulk gallons	—
Beer	4,363 ,, ,,	—

Since 1954 there has been a spurt in the illicit distillation of country liquor in the district. The activity appears to be mainly confined to an area lying to the west of the Eastern Railway's main line between Baidyabati and Bandel and covering approximately 14 sq. miles. In 1958-59 alone, 28,400 mds. of fermented wash was seized from the district. The calculated yield from this quantity in terms of finished liquor being 28,400 gallons, a further seizure of 3,400 gallons of finished liquor during the same year brought the total to 31,800 gallons representing only a part of the sizeable contraband distillation carried on in the district. Against this, the total quantity of country spirit consumed in the same year through the 376 licensed shops amounted to only 17,567 gallons. The displacement of licit liquor by the illicit would thus appear to be of alarming proportions.

Rural police: Chowkidars, Dafadars and Village Resistance Groups

An institution not within the immediate ambit of the regular police force still survives in the rural areas where local self-governing bodies like the Union Boards of the past and the village Panchayats of the present maintain a wing of rural police through such personnel as the Dafadars and Chowkidars. Historically, this institution is a legacy of the past when local authorities were entitled to raise such corps of watchmen as paiks, barkandajs and the like. The origin and continuance of this time-honoured fraternity has been dealt with in Chapter XII. Suffice it to say here that the accounts of the village Chowkidars have been carefully recorded in the old Administration Reports of Bengal. The regularization of this force in the modern sense of the term first came about under the Bengal Chowkidari Act of 1861. Thereafter it passed through various phases and have now been brought under the Anchal Panchayats. Between 1892 and 1900, its strength varied between 4,617 and 3,253 in the district,[34] the present sanctioned strength being 1,202 Chowkidars and 181 Dafadars.[35]

Village Resistance Groups act as self-help organizations for guarding the properties of the rural communities. They are fostered and materially assisted by the police administration. These voluntary bodies are also of long standing. In the Report of the Administration of Bengal (1919-20) it has been recorded, "joint patrols, union

watch committees and village defence parties are phenomena of recent growth. Good work was done by them in Hooghly, Chinsura and Serampore."[36]

JAILS AND LOCK-UPS

History

"Simultaneously with the formation of Hooghly into a district (around 1795 A.D.—Ed.), there was established a jail (at Hooghly—Ed.) for the safe custody of prisoners. At the outset the jail was little better than a big clumsy hut, being built with mats and bamboos."[37] In 1796 the jail was described by the then Judge on Circuit as "built with mats and bamboos; situated in the centre of a large bazar, and neither secure from fire nor in any degree calculated for the safe custody of prisoners."[38] By 1806 it was removed to a somewhat better building but that too was not quite what a prison should be. Accordingly, in 1814 the construction of a new jail containing six wards to accommodate about 600 prisoners was sanctioned by the Government at a cost of sicca rupees 69,580, the old gaol being turned into a civil jail. In May 1814, one Capt. Cave arrived at Hooghly to select the site and to superintend the erection of the building. The land commandeered for the purpose measured 18 bighas 2 cottahs and 12 chataks. The main building was finished in 1816 and then the hospital attached to the prison was constructed. In his exceedingly informative Hooghly Medical Gazetteer (published in 1903), Lt. Col. D. G. Crawford has included site-plans and sketch maps of the prison thus making his description an authoritative one on the history and growth of this house of detention.

The average number of prisoners in the jail was 414 between 1815 and 1829, 353 between 1830 and 1835 and 250 between 1870 and 1892.[39] Thereafter there was an upward trend in the prison population which swelled to an average of 1,713 between 1895 and 1900.[40] The prevalent attitude to the prisoners at that time was not only to confine them within the walls of the prison but to make them work as well. Outdoor work on roads was the most common task and indeed up to 1836 it was the only form of labour on which the prisoners were employed. On the recommendation of the Convict Labour Committee, which sat in Calcutta in that year, this type of employment was abolished and Mr. Samuells, the Magistrate-Collector of Hooghly at the time, embarked upon a scheme of manufacturing hand-made paper and converted the prison into what was called an industrial jail. The first industrial product was turned out in July, 1841 but the paper was coarse and of inferior quality but it was able to "defy the tooth of time, and guard against the insidious incursions on the vandalic white ants."[41] Subsequently gunny weaving, blankets manufacturing, oil pressing and such other crafts were also introduced. Writing in 1912, Mr. L.S. S. O'Malley mentioned that "the chief jail industries are oil-pressing and the manufacture of coir mats and *daris*."[42]

Lt. Col. D. G. Crawford commenting on the importance of the Hooghly jail during his time wrote, "In 1856 and 1857 frequent complaints are made by the Hughli Jail officers of the condition of prisoners transferred from other jails for labour at Hughli. The central jail system was not introduced for many years after this date, Alipur being the only jail in the province which might then be considered a central jail; but the Hughli Jail was to all intents and purposes a central jail without the name. It had a large, flourishing, and *paying* industry in the manufacture of gunny, jute mills not being so common then as they are now. Hughli has always been a small district, and the supply of home-made criminals not nearly sufficient to fill the jail, and to carry on the jail manufactures. It was therefore necessary to transfer large gangs of prisoners from other jails, for labour at Hughli, just as long-term prisoners are now transferred to central jails."[43]

In 1906, Shri Shumbhoo Chunder Dey left behind a record regarding the personnel of this prison. "The up-country sepoys, as we have already stated, keep watch and ward. They have no other duties to perform. Besides these sepoys, there are five *burkundazes* who are employed inside the Jail during the day. The warder establishment consists of 26 warders and 3 head warders. They are responsible for the safe keeping and maintenance of order, as well as for the industry of the prisoners under their charge."[44]

From Administration Reports of Bengal we find the mention of 3 prisons existing in the Hooghly district since 1883 at least—at Hooghly, Serampore and Jahanabad. Chandernagore not being part of the Hooghly district at that time and until very recently, the Hooghly Jail and the two sub-jails at Jahanabad and Serampore continued to be the entire prison establishment of the district up to the year 1899 but in 1900 the Jahanabad Sub-jail was replaced by the Arambagh Sub-jail with a change in the name of that subdivision.

Present set-up

At present there is one district jail at Hooghly and three sub-jails at the headquarters of the three outlying subdivisions, Serampore, Arambagh and Chandernagore. In the Hooghly District Jail, there is a whole-time Superintendent in charge, 1 Jailor, 1 Deputy Jailor, 3 jail clerks, 1 teacher, 1 Medical Officer and 1 compounder. Besides, there are the watch and ward staff consisting of 5 head warders, 56 warders and 1 female warder. In the sub-jails, the respective Subdivisional Officers act as part-time Superintendents assisted by a whole-time Sub-Jailor in each sub-jail. Only at Serampore Sub-jail one clerk has been posted to help the Sub-Jailor. The watch and ward staff for each sub-jail consists of 2 head warders and 8 warders.[45]

Jail population

The following four tables[46] for the District Jail and the three sub-jails pertaining to the years 1961 to 1965 show the classification of prisoners according to their prison terms.

DISTRICT JAIL, HOOGHLY

Prison Terms	1961		1962		1963		1964		1965	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Up to 1 month	875	22	890	38	937	48	1,113	25	1,313	63
From 1 to 3 months	543	14	637	23	687	16	418	5	359	18
From 3 to 6 months	297	8	163	10	195	4	240	8	210	7
From 6 months to 1 year	150	—	63	5	146	—	119	1	125	4
From 1 to 2 years	38	—	37	—	78	—	103	—	69	—
From 2 to 5 years	8	—	39	—	54	—	94	—	60	—
From 5 to 10 years	—	—	3	—	17	—	17	—	35	1
Over 10 years	4	—	—	—	—	—	—	—	4	—
For life	—	—	—	—	—	—	2	—	2	—
Sentenced to death	—	—	1	—	—	—	—	—	—	—
Total	1,915	44	1,833	76	2,114	68	2,106	39	2,177	93

SERAMPORE SUB-JAIL

Prison Terms	1961		1962		1963		1964		1965	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Up to 1 month	874	27	1,175	27	1,343	15	1,023	14	980	59
From 1 to 3 months	418	12	219	11	237	10	168	9	158	7
From 3 to 6 months	132	3	65	4	45	2	37	—	45	1
From 6 months to 1 year	49	—	26	—	17	—	10	—	16	—
From 1 to 2 years	9	—	16	1	8	—	4	—	8	—
From 2 to 5 years	—	—	1	—	4	—	—	—	—	—
Total	1,482	42	1,502	43	1,654	27	1,242	23	1,207	67

CHANDERNAGORE SUB-JAIL

Prison Terms	1961		1962		1963		1964		1965	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Up to 1 month	399	—	597	—	573	—	382	—	346	—
From 1 to 3 months	150	—	151	—	105	—	115	—	124	—
From 3 to 6 months	28	—	48	—	36	—	84	—	70	—
From 6 months to 1 year	7	—	43	—	12	—	10	—	15	—
From 1 to 2 years	13	—	8	—	—	—	—	—	—	—
From 2 to 5 years	—	—	2	—	1	—	—	—	—	—
From 5 to 10 years	—	—	2	—	1	—	—	—	—	—
Total	597	—	851	—	728	—	591	—	555	—

ARAMBAGH SUB-JAIL

Prison Terms	1961		1962		1963		1964		1965	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Up to 1 month	22	—	44	4	42	2	22	2	35	—
From 1 to 3 months	21	—	17	—	19	—	11	—	10	—
From 3 to 6 months	15	—	7	—	8	—	19	—	13	—
From 6 months to 1 year	2	—	7	—	5	—	9	—	6	—
From 1 to 2 years	4	—	1	—	—	—	8	—	3	—
From 2 to 5 years	—	—	2	—	—	—	6	—	—	—
From 5 to 10 years	—	—	—	—	—	—	—	—	1	—
Total	64	—	78	4	74	2	75	2	68	—

It appears from the foregoing tables that during the period under review the District Jail contained the largest number of prisoners followed by Serampore, Chandernagore and Arambagh, in that order; the total population at the District Jail was 10,465, at Serampore

7,293, at Chandernagore 3,322 and at Arambagh 367. Of them the District Jail housed as many as 10,145 male prisoners, the Serampore Sub-jail 7,090, the Chandernagore Sub-jail 3,322 and the Arambagh Sub-jail 359. Therefore, the total jail population of the district aggregated 21,447 during this period of which the male component was as many as 20,916 bringing the percentage to 97.52. Correspondingly, the female population during the period was 320 at the District Jail, 203 at Serampore, 8 at Arambagh and, surprisingly, none at Chandernagore. The district total of female prisoners was, therefore, 531 accounting for only 2.48 per cent of the total jail population during the period under review. It is interesting to compare the prison population with the total population of the district which stood at 22,31,418 in 1961; the total jail population during this period accounted for only .96 per cent of the district population—its male components being 1.77 per cent of the total male population and the female component being only .045 per cent of the total female population of the district.

From the four preceding tables a significant trend is discernible that prison terms are by and large confined to a period not exceeding one month. In fact, this brief sentence covered as much as 62.16 per cent of the total prison population under review. On the other hand, the term of 5 to 10 years accounted for only 0.36 per cent of all the convicts. There was a solitary case of capital punishment during these five years in the District Jail in 1962.

The modern theory of punishment emphasizes that crime, very often, is not an act of deliberation but a type of social disease and a criminal should, therefore, be treated with sympathy as a socially maladjusted person. From this point of view, it is pertinent to correlate convictions with age groups. The following four tables[47] classify the total jail population of the district during the period under review into four age groups—under 16 years of age, from 16 years to 40 years, from 40 years to 60 years and above 60 years.

DISTRICT JAIL, HOOGHLY

Age Group (years)	1961		1962		1963		1964		1965	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Under 16	48	—	43	—	98	—	102	—	69	—
16 to 40	1,674	44	1,578	74	1,492	37	1,454	23	1,678	72
40 to 60	171	—	181	2	520	31	520	16	380	20
Above 60	22	—	31	—	4	—	30	—	50	1
Total	1,915	44	1,833	76	2,114	68	2,106	39	2,177	93

Serampore Sub-Jail

Age Group (years)	1961		1962		1963		1964		1965	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Under 16	82	—	89	—	304	—	153	—	88	—
16 to 40	1,339	34	1,294	37	1,206	21	977	17	1,018	43
40 to 60	59	8	98	6	131	6	96	6	86	22
Above 60	2	—	21	—	13	—	16	—	15	2
Total	1,482	42	1,502	43	1,654	27	1,242	23	1,207	67

Chandernagore Sub-Jail

Age Group (years)	1961		1962		1963		1964		1965	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Under 16	51	—	82	—	81	—	46	—	68	—
16 to 40	465	—	692	—	595	—	460	—	415	—
40 to 60	49	—	41	—	34	—	42	—	36	—
Above 60	32	—	36	—	18	—	43	—	36	—
Total	597	—	851	—	728	—	591	—	555	—

Arambagh Sub-Jail

Age Group (years)	1961		1962		1963		1964		1965	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Under 16	—	—	1	—	—	—	—	—	—	—
16 to 40	52	1	62	3	58	2	57	2	55	—
40 to 60	12	—	15	1	16	1	18	—	13	—
Above 60	—	—	—	—	—	—	—	—	—	—
Total	64	1	78	4	74	3	75	2	68	—

It appears that in all the four jails by far the largest number of convicts belonged to the age group of 16 to 40 years. This is not unexpected as the active period in a man or woman's life roughly corresponds to these age limits. In fact, as many as 17,031 prisoners belonged to this age group accounting for 79.41 per cent of the total jail population of the district during the 5 years under review. As regards the other age groups, one difference is noticed between the inmates of the District Jail and the Sub-jails. In the District Jail the 40-60 age group has the second largest population whereas in the Sub-jails this position is occupied by those under 16. This may be explained by the fact that hardened criminals and those serving long

prison terms are usually lodged in the District Jail. If figures for a 5-year period between 1885 and 1889 are contrasted against the latest 5-year period between 1961 and 1965 on points of general population of the district and its jail population, the following interesting table emerges:

Periods		Population (1)	Jail Population (2)	Percentage between (1) & (2)	Percentage variations between A1 & B1	Percentage variations between A2 & B2
A	1865-69	10,12,768	11,836	1.17	+120.33	+81.20
B	1961-65	22,31,418	21,447	.96		

This table brings into relief two broad facts. First, the percentages of jail population to the general population have climbed down considerably, from 1.17 in the former period to .96 in the latter. Secondly, while the district population has increased by 120.33 per cent during these 75 years the convict population has increased by only 81.20 per cent. Scientifically, it is difficult to ascribe values to such social trends without taking into account other influencing factors like environments, people's attitudes etc. during the two base periods but it may not be completely besides the point to be hopeful of decreasing criminality in the district.

Reformatory Activities

Local reports show that except for the District Jail nothing much has been done by way of reformatory activities in the three Sub-jails. Although there is no Borstal school attached to the District Jail, there is a wholetime teacher there to impart education to prisoners serving prison terms of three months or more The curriculum includes teaching of the three R's and the District Social Education Department conducts periodical examinations and gives proficiency certificates to successful candidates. A Readers' Corner has recently been opened where under-trial prisoners and convicts are given facilities to read books and periodicals under the supervision of the teacher. Besides, some religious education is given in the District Jail and the Serampore Sub-jail. The prisoners are also encouraged to take part in games and the playing of volleyball, football etc. appears to be popular among them. The inmates have facilities of listening to the All India Radio programmes through installed radio sets and the District Publicity Department occasionally entertains them to free film shows.

Non-official Visitors

For all the four jails in the district there are non-official visitors drawn from the elite of the respective towns who are interested in social service. The panel for the District Jail consists of 1 lady and 6 gentlemen including the Principal of the Hooghly Women's College,

two members of the Legislative Assembly and the priest of the local Church. Non-official visitors in respect of the three Sub-jails include 1 lady and 2 gentlemen for Serampore, 12 gentlemen for Arambagh and 4 for Chandernagore. These social workers frequently visit the prisoners, listen to their complaints etc. and suggest ameliorative measures to the respective jail authorities.

ORGANIZATION OF JUSTICE

History

It has already been noted that during the Mughal period Koranic laws served as the basis of criminal justice applicable to both Muslims and non-Muslims. In Akbar's time two institutions, the Quazi and the Mir'Adl, were brought into being, the former being the administrator of Islamic law, both civil and criminal and the latter, a secular officer whose authority extended to cities and to actions not specifically covered by the religious laws. At this time was also established the office of the Quazi-ul-Qazat or the Chief Quazi who had powers to appoint subordinate Quazis with the consent of the ruler. The subordinate Quazis were posted in all important cities and towns. Under the Emperor, who was the supreme court of both original and appellate jurisdictions, the Chief Quazi functioned as the head of the judicial department, exercising, as Sadr, a controlling authority over the subordinate Quazis and the Mir'Adls.[48] Side by side with this judicial set-up of the Mughals there existed an indigenous system under which the local zemindars could administer criminal justice with, and more often without, any legal authority.[49] With the weakening of the rulers' powers the zemindars assumed judicial authority to an increasingly alarming extent and by the latter half of the 18th century "these *Zemindars* were, beyond doubt, the *de facto* judges in every district within their jurisdictions."[50] In the Fifth Report of the Select Committee on the Affairs of the East India Company dated the 28th July, 1812 (edited by Mr. W. K. Firminger), an interesting account has been given as to the various conflicting opinions regarding the real character of the Mughal system of justice. As regards the judicial authority of the zemindars, Mr. Field has been quoted as commenting that "the zemindars . . . assumed that power for which no provision was made by the law of the land, and they exercised it with a view, not to justice but their own interests."[51] Mr. Field in his work, the Regulations of the Bengal Code, published a list, claimed to have been circulated in a letter to the Committee of Circuit, dated the 15th August, 1772, which mentioned as many as 10 different types of judicial offices existing side by side and exercising exclusive, concurrent and, very frequently, conflicting jurisdictions. By 1769 the Government at Fort William, "to put an end to the venality of judges,"[52] appointed supervisors throughout its realm having jurisdictions over their respective districts, and Hooghly was one such district. The Committee on Circuit with Warren Hastings as President drew up a plan in August, 1772 providing for the establishment in

each district of two courts of civil and criminal judicature making the jurisdiction of the Dewani Adalat or Civil Court distinct from that of the Fouzdari Adalat or Criminal Court. The Dewani Adalat was to be presided over by the European Collector of the district representing the Company and administering civil justice with the help of the District Dewan and other Indian officers. The plan of 1781, provided for 18 such Mofussil Dewani Adalats.[53] In 1773 the Sadar Nizamat Adalat or the supreme court of criminal judicature was established in Calcutta and by January, 1776 Reza Khan's plan for criminal justice was implemented providing for the setting up of 23 criminal courts in Bengal and Bihar, Hooghly having one of them. In 1781 the judges of the Mofussil Dewani Adalat were appointed Magistrates also. In 1787 the offices of the Judge, Collector and Magistrate were united in the same person (except at Dacca and Murshidabad) but under specific rules for his guidance in each capacity.[54] In 1790, according to the new plans of Lord Cornwallis, the former Fouzdari Courts in the districts presided over by Muslim judges were abolished and new courts known as Courts of Circuit were established in their place.[55] The three provinces of Bengal, Bihar and Orissa were divided into four Divisions, each comprising several districts. The mobile Circuit Courts were to go on circuit to each Division at regular intervals. While the offices of the Judge and the Magistrate were united in the same person, a separate official to look after the Collector's work was appointed in each district.[56] In 1792 the Magistrates were authorized for the first time to try petty offences and to inflict punishments not exceeding fifteen days' imprisonment or a fine not exceeding fifty rupees. The number of pending suits, however, continued to pile up and it was only under Regulation 49 of 1803 that these arrears were attended to by the appointment of Assistant District Judges to stations where the load of business had been unusually heavy. Two other reforms effected during this period were that certain Zilla and City Courts' jurisdictions were readjusted and provision was made for the appointment of Sadar Amins. Within the framework of the reforms of 1793, a new Zilla Court had been established in Hooghly in 1795.[57]

"In November, 1814, the Directors (of the Company) recommended that the heads of villages, or village Munsifs as they called them, should be invested with a limited measure of judicial authority, and that the jurisdiction of village panchayats should be recognized in the cognizances of the civil suits."[58] "Though the Permanent Settlement had rendered the task of the Collector easier, the undefined character of rights and tenures had opened the floodgate of litigation. So the problem there was how to separate magistracy from the office of the Judge in order to enable the latter to devote his time and energy exclusively to the disposal of civil suits."[59] In the districts of Hooghly, Jessore, Nadia, Purnia and Trihut, where

the number of pending suits was exceedingly large, provision for such separation became all the more necessary. In April, 1823, the number of pending suits in the district of Hooghly numbered as many as 2,198.[60] Regulations passed in 1814 and 1821 modified and extended the powers and functions of the judges. A reorganization of the judicial system effected by Regulation V of 1831 and subsequent regulations invested in the District Judges the duties of the Sessions Judge as well but their magisterial functions were, in turn, transferred to the Collectors. Regulation VIII of 1833 permitted appointment of Additional Judges who might discharge duties of the District Judges and raised the original jurisdiction of the Zilla Courts to Rs. 10,000.

In the dispensation of criminal justice the offices of Assistant and Joint Magistrates were first created in 1810 to afford relief to the Zilla Magistrates who were authorized to refer cases arising out of petty offences to such officers for trial. These offices, however, were discontinued later and replaced by those of the Deputy Collectors. The Hooghly-Howrah district was formed as a separate administrative unit in 1793[61] and a Judge and a Magistrate were appointed there in the same year. The revenue jurisdiction of Hooghly-Howrah was separated only in 1819 prior to which it formed a part of the Burdwan Collectorate.

With the sessions jurisdiction being invested in the District Judge in 1832, this post was redesignated as the District and Sessions Judge. Howrah as an independent magisterial charge was separated from Hooghly in 1843 and was placed under a Joint Magistrate but the judicial administration continued under a unified judgeship. In 1839, there were 9 munsifs in the Hooghly-Howrah district stationed at Hooghly, Nauseria, Mahanad, Baidyabati, Rajapur, Dwarhatta, Kshirpai, Baly and Uluberia. In 1860, there were 10 Magisterial and 22 Civil and Revenue Courts. In 1862, the numbers increased to 11 Magisterial and 23 Civil and Revenue Courts, which was raised again in 1869 to 14 and 25 and in 1870-71 to 16 and 30 respectively.[62]

"By the year 1861, the uniformity in the substantive and the procedural law of the country was achieved with the passing of the Indian Penal Code and the Indian Criminal Procedure Code. . . . The English made and unmade various systems of courts in an endeavour to achieve a suitable system of judicature and at last in 1861 it seems to have been broadly achieved. Provisions had been made for the establishment of the High Court at Calcutta to function as the highest court of criminal judicature with jurisdiction throughout Bengal. Below the High Court there are the District and Sessions Judges whose jurisdiction is usually, but not always, co-extensive with the District. He has power to try original criminal cases on committal and to hear criminal appeals from the decisions of first-class magis-

trates within his jurisdiction. Below him there are the magistrates and a number of honorary magistrates. . . . The system which was introduced in Bengal in 1862, prevails even now without any substantial change having been made. That it should have stood the test of time for a century bears testimony to its suitability and worth."[63]

Only another stage remains to be described in the history of the judicial evolution of the Hooghly district and that took place as recently as in 1936 when the Howrah district was separated from Hooghly and placed under another District and Sessions Judge stationed at the district headquarters, Howrah.[64]

Civil Justice Administrative set-up

In 1912, in the joint Hooghly-Howrah district, the judicial set-up consisted of the courts of the District and Sessions Judge, the Additional District and Sessions Judge, 1 Small Causes Court for Hooghly, Serampore and Howrah, 1 Subordinate and 2 Additional Subordinate Judges' Courts, 2 Munsifis at Hooghly, 3 at Serampore and another 3 at Arambagh. Since then the set-up has undergone changes at two stages, once in 1936 when the Howrah district was separated from the judicial control of the Hooghly judiciary and again in 1954 when the erstwhile French territory of Chandernagore was brought under the judgeship at Hooghly. The present structure, therefore, consists of the District and Sessions Judge at the head, 2 Additional District and Sessions Judges, 2 Subordinate Judges and 8 Munsifs—2 in each subdivision. The money values of cases triable by the Munsifs vary between Rs. 2,000 and Rs. 5,000 as fixed by the State High Court. The original suits arising within the jurisdiction of each Munsif are filed with him and appeals therefrom lie with the District Judge within the value of Rs. 10,000 and those of higher value go to the High Court direct. The District Judge of Hooghly has been empowered under various Acts as competent authority to deal with litigations covered by such Acts. To mention a few of them, he is empowered under the Indian Companies Act of 1956; he is also the Land Acquisition Judge; he constitutes besides the Tribunal under the Estates Acquisition Act of 1953; he is again the Appellate Authority under the Industrial Employment (Standing Orders) Act, 1948 and the Arbitrator under the Defence of India Act, besides being the Competent Authority under Act XVI of 1951, the Claims Commissioner under the Railway Accident Rules and the Legal Authority under the Hindu Marriage Act. Although there was a separate judge previously for dealing with the Small Cause Court cases in Hooghly, at present the Munsifs dispose them of up to a value of Rs. 300 and the Subordinate Judges up to a value of Rs. 750.

Work load

The work load of the courts exercising civil jurisdiction within the district will be apparent from the following table[65] giving a yearwise break-up of the number of suits instituted in the courts of the various categories of judicial officers between 1955 and 1960.

Year	District Judge & Addl. Dist. Judges	Subordinate Judges	Munsifs
1955	21	183	11,492
1956	52	165	7,441
1957	50	280	6,961
1958	21	274	5,171
1959	51	299	2,896
1960	45	175	3,076

The present work load will be better understood by classifying the suits into various categories—suits, cases, appeals and criminal cases, appeals and motions. The table[66] below outlines the magnitude of judicial work in the district for the succeeding five years:

Suits:	1961	1962	1963	1964	1965
S.C.C.	565	517	453	361	329
Money	434	448	452	442	382
Rent	5	14	10	19	17
Title	2,126	2,105	2,347	2,260	2,242
Cases:					
Execution Cases	2,011	1,714	1,507	1,447	1,203
Judl. Misc. Cases	1,683	1,664	1,689	1,690	1,151
Non-Judl. Cases	51	55	48	53	50
Appeals:					
Reg. Appeals	1,338	1,181	1,214	1,211	1,123
Misc. Appeals	630	373	389	347	394
Cr. Cases, Appeals, Motions:					
Sessions & Ref. Cases	61	93	98	93	105
Criminal Appeals	269	260	288	239	250
Criminal Motions	84	88	89	93	84
Spl. Court Cases	3	7	13	19	14

A further analysis is made in the following table[67] which shows yearwise totals of hearings (a single case is disposed of after several hearings) given to various types of cases pending before the different courts.

Year	Under Ordinary Procedure Contested	Under Ordinary Procedure Uncontested	S.C.C. Procedure Contested	S.C.C. Procedure Uncontested	Civil Appeal Contested	Civil Appeal Uncontested	Sessions
Munsifs:							
1960	827	1,600	111	285	135	144	—
1961	565	1,437	158	379	122	95	—
1962	549	1,383	150	400	64	92	—
1963	580	1,529	105	370	195	176	—
1964	761	1,105	566	2,114	172	180	—
1965	755	920	156	369	134	77	—
Subordinate Judges:							
1960	697	2,876	396	405	132	174	—
1961	910	1,491	230	480	114	135	—
1962	741	1,231	276	478	190	132	—
1963	699	1,466	101	54	95	85	—
1964	680	1,621	168	347	207	242	—
1965	480	817	265	360	121	242	—
District Judge and Addl. District Judges:							
1960	267	448	—	—	254	188	39
1961	381	829	—	—	236	221	37
1962	358	616	—	—	222	211	40
1963	127	344	—	—	142	147	46
1964	309	481	—	--	297	198	36
1965	288	576	—	—	169	326	37

Previously, the court of the District Judge mainly attended to appeals and probate cases along with a few references arising out of land acquisition matters. Today with a welfare State busy in acquiring more and more land for various development projects, litigations have increased on this score keeping the District Judge busier with them. Moreover, civil and criminal appeals of higher denominations constitute another major load on the District and Additional District Judges. The Subordinate Judges and the Munsifs handle the bulk of suits under the ordinary procedure. The latter courts used to be laden with rent suits in the past but with the abolition of intermediary rights on land under the West Bengal Estates Acquisition Act of 1953 the number of such suits is not of any consequence now. The vacuum is, however, being filled by declaratory suits arising out of the revisional survey and the contested entries

made under it. The cases under the Land Reforms Act, originally tried by the Bhag Chas Boards, are now being disposed of by the Munsifs in appealate jurisdiction. Suits for possession of land or for recovery of money are also quite frequent before the Munsifs and the Subordinate Judges, divided between them according to their valuations.

In course of the last 100 years the character of civil litigation has changed beyond comparison both in the causes of action as also in the provisions of law. The table[68] below quoted from the Report on the Administration of Bengal, 1864-65, is reproduced to show the extent of these changes.

Types of Cases	Principal Sudder Ameens	Sudder Ameens	Moonsifs
Suits for real property			
(*a*) By Sale	11	9	104
(*b*) By Gift	1	—	—
(*c*) Mortgage	7	9	18
(*d*) By Will	1	—	—
(*e*) By Dowry	—	—	1
(*f*) By Right of Pre-emption	—	—	12
Inheritance			
(*a*) Under the Hindu Law	26	3	10
(*b*) Under the Mohamedan Law	7	2	9
Lakhiraj Suits	—	2	59
Suits regarding tenures	9	15	415
Suits regarding sale by Collectors	1	2	—
Suits for Land	11	48	442
Religious suits	—	1	4
Suits for Money Embezzled	—	1	1
Money Claims	67	79	2,373
Suits for Rent	1	—	6
Claims			
(*a*) For Personal Property	13	48	293
(*b*) Damages	5	5	223
Total	160	224	3,970

Divorce

The Hindu Marriage Act of 1956 provides for a very basic liberty in the life of the community, namely the right of a maladjusted

spouse to get rid of his or her unwanted marital tie. Such a piece of social service legislation was unthinkable so far within the ambit of Hindu law. The following table[69] shows the incidence of divorce proceedings in the district since 1956 when the Hindu Marriage Act came into force.

Year	Suits instituted	Suits allowed	Suits rejected	Percentage of suits allowed
1956	4	2	2	50
1957	8	3	5	37.5
1958	3	2	1	66.7
1959	7	5	2	71.5
1960	7	5	2	71.5
1963	16	3	13	18.75
1964	24	8	16	33.33
1965	25	12	13	48

While reporting the above figures the District and Sessions Judge of Hooghly stated that "the suits though usually confined to young people occasionally bring to court fairly aged couples thus indicating a gradual weakening of the old ideas about marriage in the society as a whole." From a modest beginning with only 4 cases in 1956, the number of suits instituted soared to more than six times in 1965.

Criminal Justice

Administrative set-up

In 1912 the administrative set-up for dispensation of criminal justice in the district comprised the following Magistrates under the overall supervision of the District Magistrate and the District & Sessions Judge: at Sadar, 4 Deputy Magistrates with first class powers, 1 Deputy Magistrate with second or third class powers and 1 or 2 Sub-Deputy Magistrates with third class powers; at Arambagh, 1 Magistrate with first class powers and a Sub-Deputy Magistrate with second or third class powers; at Serampore, 1 Deputy Magistrate with first class powers and another Deputy Magistrate with second or third class powers besides the Subdivisional Magistrates in each of the then three subdivisions.[70] Jurisdictions and functions of the various Magistrates according to the nature of their powers have been closely defined in the Criminal Procedure Code.

In the present set-up although the Magistrates are under the administrative control of the District Magistrates and the Additional District Magistrates, appeals, motions etc. from their decisions lie with the District and Sessions Judges. Some of the motions are, of course, within the concurrent jurisdiction of both the District Magistrates and District and Sessions Judges. The Subdivisional Officers, who are *ex officio* Subdivisional Magistrates, do not directly hold

courts for trials but they exercise certain preventive jurisdictions under the Criminal Procedure Code. In each subdivision, the senior-most Magistrate with first class powers generally functions for the Subdivisional Magistrate within the limitation of powers vested upon him. He takes up the 'general files' and the 'police papers' under section 190 of the Criminal Procedure Code and also transfers cases under section 192 of the same Code to the files of other Magistrates for trial. In April 1966, besides the 4 Subdivisional Magistrates, 4 courts of stipendiary Magistrates with first class powers, 2 with second class powers and 2 honorary Magistrates with first class powers functioned at Sadar; at Serampore, there were 4 Magistrates with first class powers and 2 Magistrates with second class powers; 2 Magistrates with first class powers, 1 with second class powers and 2 with third class powers sat at Chandernagore while 2 Magistrates with first class powers and 1 with second class powers held court at Arambagh.

Work load

The following table[71] gives a yearwise break-up of the number of cases instituted, the number of cases disposed of and the number of cases left pending over the 5-year period from 1961 to 1965.

Year	Cases filed	Cases disposed of	Cases pending
1961	26,113	23,185	1,369
1962	22,603	18,730	2,925
1963	20,290	16,755	1,678
1964	17,882	14,313	1,637
1965	21,516	17,905	1,913
District total	1,08,404	90,888	9.522

Annual averages for these 5 years are 21,680.8 cases instituted, 18,177.6 cases disposed of, and 1.904.4 cases carried over to the succeeding year. It should, however, be mentioned here that these spill-over figures, unspecified from year to year, are included in those in the second column of the preceding table. That the work load of the Hooghly magistracy is heavy cannot be doubted. It should be said to its credit that out of the colossal total of 1,08,404 cases insti-tuted during these 5 years, as many as 90,888 were disposed of giving a percentage of disposal as high as 83.84.

Taking a broader perspective we find that between 1951-55 and 1961-65 there was a spectacular increase in the number of cases filed which may be partly explained by the population explosion that has taken place in the district meanwhile. The following table illustrates this point.

	Period	Population (1)	Total No. of cases instituted (2)	Percentage between (1) & (2)	Percentage variations between A1 & B1	A2 & B2
A	1951-55	15,54,320 (in 1951)	62,443	4.02	—	—
B	1961-65	22,31,418 (in 1961)	1,08,404	4.86	+43.56	+73.6

The preceding figures bear out that the increase in litigation has outstripped the growth of population of the district. While population between these two periods increased by only 43.56 per cent, criminal cases increased by as much as 73.6 per cent. Besides the population factor, the reasons for such imbalance might be traced in the economy of the district. During the overall period, economic pursuits increased as did the enforcement regulations, generating law-breaking tendencies and socially maladjusted habits. Together, these causes may serve as illustrative, if not exhaustive, explanations.

The work load of the Hooghly Magistracy, broken down to subdivisional levels, over the 5-year period 1961-65 gives the following figures:

	Cases filed	Cases disposed of	Cases pending over the year
Serampore	44,267	38,582	5,685
Sadar	36,935	28,701	240
Chandernagore	20,992	18,156	2,836
Arambagh	6,210	5,449	761
District Total	1,08,404	90,888	9,522

As usual Serampore leads the other subdivisions, Sadar, Chandernagore and Arambagh in that order. It must be said to the credit of Serampore that although the strength of its magistracy is somewhat weaker than that in the Sadar subdivision, its performance is conspicuously better than that of Sadar. In fact, of the total cases instituted 40.85 per cent belong to Serampore, 34.04 to Sadar, 19.37 to Chandernagore and only 5.74 to Arambagh. Similarly, of the cases disposed of 42.45 per cent are in Serampore, 31.58 per cent in Sadar, 19.97 per cent in Chandernagore and only 6 per cent in Arambagh. As regards the pending cases, the Sadar subdivision puts forth a much bettor performance by having only 2.52 per cent of the backlog followed by Arambagh, Chandernagore and Serampore sharing 8, 29.78 and 59.7 per cent of the arrears respectively.

Probation system

The system of probation for juvenile delinquents was introduced in the State under the West Bengal Offenders' (Release, Admonition and Probation) Act of 1954 which was later replaced by a Central Act, the Probation of Offenders' Act, 1958, that came into effect

in May, 1960. Instead of sentencing them to prison terms under the ordinary law, this measure offers sympathetic opportunities to the juvenile delinquents who may have strayed into crime due to adverse circumstances. Under the probation system such delinquents, on conviction, are not confined in jail but are released in the custody of their legal guardians or in that of the District Probation Officer, responsible for looking after them for such time as may be specified by the convicting court and reporting to it periodically. In Hooghly there is a District Probation Officer stationed at Chinsura. The delinquents below 21 years of age who were released on probation during the last 5 years were 35 in 1961, 32 in 1962, 23 in 1963, 24 in 1964 and 14 in 1965.[73] The offences for which they were generally convicted were crimes against property like theft etc. or lighter lapses against person like simple hurt etc. The figures quoted show a general declining trend. It is reported that of the offenders who were released on probation in 1961 only 5, in 1962 only 1 and in 1963 another one reverted to crime while there was no such case of relapse in 1964 and 1965.[73] If any conclusion can be drawn from these statistics, it may be said that the probation system is showing encouraging results in the district.

State assistance

In civil litigations State assistance is available only under Orders 33 and 34 of the Civil Procedure Code which provide for remission of stamp-fees due from parties belonging to the Scheduled Tribes. Legal assistance is also available to them from a panel of Government pleaders maintained by the local Tribal Welfare Officer. In criminal cases, the only State assistance comes in the shape of arrangements for the defence of an otherwise undefended accused charged with murder.

Separation of the Executive from the Judiciary

Separation of the judiciary from the executive was in the process of implementation at the time of writing the present Gazetteer when the Magistracy, at lower levels, was still under the administrative control of the District Magistrate although, as has been mentioned earlier, the appellate authority from their judgements was the District & Sessions Judge. By an executive order a kind of functional separation has been sought to be effected by enjoining that the trying magistrates should be given judicial duties exclusively. Although the trying and the executive magistrates belong to the same cadres and have interchangeable functions, the former, so long as they sit as criminal courts, are allotted, as far as possible, judicial duties alone.

Union Courts, Union Benches and Nyaya Panchayats

Prior to the enactment of the West Bengal Panchayat Act of 1957, Union Benches and Union Courts, manned by representatives of the local people, functioned in many parts of the district. The Act of 1957 was put into effect by stages replacing these Benches and Courts by Panchayati institutions at different points of time. In 1961 there were 26 Union Courts and an identical number of Union Benches in Hooghly.[74] The following table[75] shows the numbers of

cases which came before these rural organs of justice during the five years from 1955 to 1959.

Year	Union Benches	Union Courts
1955	1,192	898
1956	1,084	778
1957	798	699
1958	630	666
1959	330	263

The declining trend in the number of cases instituted with the Union Benches and Courts is mainly explained by the progressive abolition of Union Boards after 1957. On the other hand, no Nyaya Panchayat under the new Act has been set up so far in the Hooghly district.*

LEGAL PROFESSION AND BAR ASSOCIATIONS

The legal profession of the district has been dealt with in Chapter VIII. Only a few points regarding the arrangements for representation of State interests before the law courts are discussed here.

The District Magistrate maintains two panels of lawyers, one for attending to civil and the other for criminal cases in which the State is involved. The retained State-lawyer for civil litigations is known as the Government Pleader whose services are also utilized when legal advice is sought for by any of the local officers. A similar post is held by the Public Prosecutor for supervising the criminal interests of the State. The pleaders on either panel are commissioned from time to time for specific cases, civil or criminal.

Customarily, the Public Prosecutor or, in his absence, panel pleaders appear before the Sessions courts to conduct criminal cases but in the magisterial courts the State is represented by police prosecutors of the ranks of Inspectors, Sub-Inspectors and Assistant Sub-Inspectors who are liable to be transferred to other posts in the regular police cadres but so long as they are appointed for such purposes they function as officers of the court. The present strength of such personnel in the district is shown below.[76]

Station	Inspector	Sub-Inspector	Asst. Sub-Inspector
Sadar	1	4	5
Serampore	1	3	4
Chandernagore	—	3	3
Arambagh	—	1	2

* For further details, Chapter XII may be seen.

Bar Associations

In 1961 there were two Bar Associations at each of the subdivisional headquarters, those at Sadar forming the District Bars. One set of associations was then for the pleaders and advocates and the other was for the mukhtars. The subdivisionwise strength of each of these associations as they stood in 1961 are given in the following table.[77]

Subdivision	Pleaders & Advocates	Mukhtars
Sadar	102	52
Serampore	50	18
Arambagh	28	11
Chandernagore	23	8

With the 1964 amendment of the Advocates Act 1961 the mukhtars were entitled to enrol themselves as advocates without having to sit for another academic examination and many of them utilized this opportunity rendering the strict demarcation between the memberships of these associations rather vague and overlapping. Reports received in 1966[78] reveal that at Sadar and Arambagh subdivisions there are, as usual, 2 Bar Associations at each station—one for the pleaders and advocates and the other for the mukhtars. The Mukhtars' Bar at Sadar consists of 54 members, of which 32 are advocates and 22 mukhtars and that at Arambagh has 7 mukhtars on its membership roll. The Bar Associations for pleaders and advocates at these two subdivisions have memberships around the earlier figures. But changes have taken place in the other two subdivisions. In Serampore 3 Bar Associations have come into existence—one for the pleaders, one for the advocates and the other for the mukhtars with memberships of 8, 18 and 7 respectively. At Chandernagore, there is now only 1 Bar Association comprising a membership of 8 pleaders and 8 mukhtars. The first lady pleader to join the District Bar was enrolled as recently as in May 1966.[79] There are libraries attached to all these Associations, mainly stocking works on jurisprudence which are found helpful by the members.

As is the case in many of the outlying districts of West Bengal, members of the legal profession in Hooghly have provided over the years a sizeable percentage of the local elite and have also played important roles in social leadership.

NOTES

1-2 Source: Superintendent of Police, Hooghly.
3-5 Source: Superintendent of Excise, Hooghly.
6 Source: Superintendent of Police, Hooghly.
7 Report on the Administration of Bengal, (1867-68). p. 38.
8 Report on the Administration of Bengal, (1872-73). p. 103.
9 Sourec: Lobour Commissioner & Registrar of Trade Unions, West Bengal.
10 B. B. Misra—The Central Administration of the East India Company, 1773-1834. Manchester, 1959. p. 302.

11 ibid, p. 303.
12 D. J. McNeille—Report on the Village Watch of the Lower Provinces of Bengal. p. 5.
13 Seid Gholam Hossein Khan—Seir Mutaqherin. Calcutta, 1902. Vol. III. pp. 178-9.
14 G. W. Farrest—Selections from the Letters, Despatches, and other State Papers, preserved in the Foreign Department of the Government of India, 1772-85 Vol. II. Calcutta, 1890. p. 454.
15 Proceedings of the Governor-General in Council, April 19, 1774.
16 T. K. Banerjee—Background of Indian Criminal Law. Calcutta, 1963. p. 186.
17 ibid. p. 188.
18 ibid. p. 190.
19 ibid. p. 192.
20 ibid. p. 195.
21 F. J. Shore—Notes on Indian Affairs (1837)—Vol. II. pp. 378-95.
22 T. K. Banerjee—op. cit. pp. 217-8.
23 ibid. p. 220.
24 Source: Superintendent of Police, Hooghly.
25 Report on the Administration of Bengal (1963-64). p. v.
26 Source: Superintendent of Police, Hooghly.
27 Monomohan Chakrabatti—A Summary of the Changes in the Jurisdiction of Districts in Bengal (1757-1916). Calcutta, 1918. p. 37.
28 A. Mitra—Census of India, 1951: District Handbook, Hooghly. Calcutta, 1952. p. 8.
29 Report on Administration of Bengal (1886-87).
30-31 Source: Superintendent of Police, Hooghly.
32-33 Source: Superintendent of Excise, Hooghly.
34 Reports on the Administration of Bengal (1892-1900).
35 Source: Director of Panchayats, West Bengal.
36 Reports on the Administration of Bengal (1919-20). p. 15.
37 Shumbhoo Chunder Dey—Hooghly Past and Present. Calcutta, 1906. p. 339.
38 Toynbee—Administrative History of Hooghly District. Calcutta, 1888. p. 53.
39 Shumbhoo Chunder Dey—op. cit. p. 34.
40 Reports on the Administration of Bengal (1895-1900).
41 Shumbhoo Chunder Dey—op. cit. p. 343.
42 L. S. S. O'Malley & Monmohan Chakravarti—Bengal District Gazetteers: Hooghly. Calcutta, 1912. p. 221.
43 Crawford, D. G.—Hughli Medical Gazetteer. Calcutta, 1903. p. 408.
44 Shumbhoo Chunder Dey—op. cit. pp. 348-9.
45 Source: Superintendent of District Jail, Hooghly.
46-47 Source: Superintendents of the District Jail and the three Sub-Jails.
48 H. Blockmann—Ain-i-Akbari, Vol. I. Calcutta, 1872. p. 268
49 T. K. Banerjee—op. cit. p. 134.
50 Proceedings of the Select Committee at Fort William: August 16, 1769: Verelst—Views etc. pp. 237-38.
51 Field—The Regulations of the Bengal Code (Introduction). p. 135.
52 Proceedings of the Select Committee, Fort William, dated August 16, 1769.
53 B. B. Misra—op. cit. p 237.
54 T. K. Banerjee—op. cit. p. 144.
55 T. K. Banerjee—op. cit p. 146.
56 T. K. Banerjee—op. cit. p. 147.
57 B. B. Misra—op. cit. p. 266.
58 B. B. Misra—op. cit. pp. 270-1.
59-60 ibid. p. 277.
61 Source: District and Sessions Judge, Hooghly, who appears to quote, 'A Sketch of the Administration of the Hooghly District, 1795-1845' by Mr. George Toynbee (Calcutta, 1888) as authority.
62 Source: District & Sessions Judge, Hooghly.
63 T. K. Banerjee—op. cit. p. 180.
64-67 Source: District & Sessions Judge, Hooghly.
68 Report on the Administration of Bengal, 1864-65. pp. i-v.
69-70 Source: District & Sessions Judge, Hooghly.
71 Source: District Magistrate, Hooghly.
72-73 Source: District Probation Officer, Hooghly.
74-75 Source: District & Sessions Judge, Hooghly.
76 Source: Superintendent of Police, Hooghly.
77 Source: District & Sessions Judge, Hooghly.
78 Source: District Magistrate, Hooghly.
79 Amrita Bazar Patrika. Calcutta, May 25, 1966.

CHAPTER XII

LOCAL SELF-GOVERNMENT

HISTORY OF LOCAL SELF-GOVERNMENT IN THE DISTRICT

Introduced in the town of Hooghly in June, 1814, Bengal Regulation XIII of 1813 sowed the first seeds of municipal government in the district. It enabled the inhabitants to make provisions for watch and ward to protect their property. Formerly, the town contained 18 *mahallas* or wards; but as many of them existed only in name, the then District Magistrate divided the town into two main sectors—Baly and Golghat. "The first contained 2,359 houses and huts, the assessment on which thereon was Rs. 173 per mensem, and for its protection 32 chaukidars were appointed at Rs. 4 each. The second division contained 1,719 houses, with an assessment of Rs. 160 and an establishment of 28 chaukidars. . . . Shortly afterwards the Magistrate was able to report that 'since the establishment of the chaukidars in the town of Hooghly there have been no robberies or thefts.' "[1] Certain difficulties having cropped up, the above regulation was amended by Regulation XXII of 1816, which laid down for the first time rules for conservancy, lighting and other municipal amenities. In May, 1823, the Governor-General in Council directed that the funds accruing from surplus town-duties should be spent in "filling up hollows, stagnant pools, and useless ditches, in the construction of *pucca* drains and bridges, the opening up and widening of the public roads, and in other minor improvements."[2] An amount of Rs. 2,000 was spent for such purposes in 1825, the corresponding expenditure in 1829 being Rs. 4,768. "The road near the Collector's cutchery was widened: the large tank opposite the Civil Court buildings, the Pipalpati and several other tanks in the town were dug, trees were planted by the sides of roads—among them the fine casuarina trees which are now so distinct a feature of the town—and several of the roads were metalled with brick. Some 'filthcarts' were also purchased, and a staff of 'scavengers' was entertained to work them."[3] By Regulation XV of 1837, surplus collections were allowed to be utilized for urban improvement. But "some parts of the town were still overgrown with jungle and contained many stagnant pools which required to be filled up at once. The river, moreover, was subject to contamination from corpses and carcasses and the dirty contents of conservancy carts which used to be constantly thrown and emptied into it."[4] These facts reveal that there was still much room for municipal improvement in spite of the progress already made.

About this time, the local inhabitants offered to guarantee the

full amount of the existing assessments and to realize the collections themselves. The move, strongly supported by the then District Magistrate, eventually led to the passing of Act X of 1842 which made better provision for public health and convenience. Under this Act, Chandernagore was added to the municipality which formerly included only Hooghly and Chinsura. No marked progress was made till 1856 when the Government passed Act XX under which the District Magistrate was given powers to determine the number of chaukidars and levy taxes either according to the circumstances of the assessee or the value of his holdings. An intermission followed the commotions of 1857 but with the transfer of administrative responsibility from the Company to the Crown in 1858, the Government passed Act III of 1864, which was the first genuine attempt to reduce municipal administration to a system. Under this Act municipalities started functioning in Hooghly one after another, the earliest being the Hooghly-Chinsura Municipality which was established in 1865. The District Road Committee, established under the provisions of the District Road Cess Act of 1871, left room for the setting up of a District Board which was constituted under the Bengal Act III of 1885. The next phase was reached with the Indian struggle for freedom leading to the Montagu-Chelmsford Reforms of 1919 which caused a considerable decrease in the rigidity of administrative control over the local self-governing bodies in the district. Under the provisions of Bengal Act V of 1919 Union Boards came into being for the performance of local services and proper maintenance of the rural police. With the coming of independence, people's participation in local self-government was accorded greater recognition through West Bengal Act I of 1957 and West Bengal Act XXV of 1963 under the provisions of which Gram Panchayats, Anchal Panchayats, Anchalik Parishads and the Zilla Parishad were formed.

MUNICIPALITIES

There are ten municipalities and a municipal corporation in the district. The Sadar subdivision has two of them, viz. Bansberia and Hooghly-Chinsura; Chandernagore has three, viz. Champdani and Bhadreswar municipalities and the solitary municipal corporation of Chandernagore; Serampore has five, viz. Baidyabati, Serampore, Rishra, Konnagar and Uttarpara-Kotrang and Arambagh has one, Arambagh. The date of establishment, area in square miles,[6] number of occupied residential houses[6] and population[7] of each of these local self-governing bodies are given below:

Name of the Municipality or Corporation	Date of establishment	Area in sq. miles	No. of occupied residential houses	Population
Hooghly-Chinsura	1865	6.00	28,849	83,104
Bansberia	1869	3.50	21,788	45,463

Name of the Municipality or Corporation	Date of establishment	Area in sq. miles	No. of occupied residential houses	Population
Chandernagore (Corporation)	1955	3.73	25,293	67,105
Bhadreswar	1869	2.50	18,383	35,489
Champdani	1917	2.50	22,498	42,129
Baidyabati	1869	3.50	16,337	44,312
Rishra	1944	1.25	20,975	38,535
Serampore	1865	2.27	37,133	91,521
Konnagar	1944	1.67	12,724	29,443
Uttarpara-Kotrung	1964	2.80	18,924	52,163
Arambagh	1886	7.50	6,875	16,551
Total		37.22	2,29,479	5,45,815

Together, the ten municipalities and the single municipal corporation of the district cover 3.07 per cent of the total area, 22.87 per cent of the total occupied residential houses and 24.45 per cent of the total population of the district.*

The municipalities constituted during the present century resulted either from the division of an existing municipality or from the amalgamation of two. The Champdani municipal area was originally a part of the Bhadreswar municipality created in 1869 from which it was separated in 1917. Similarly, Rishra and Konnagar originally belonged to the Serampore municipality, established in 1865, from which they were separated and constituted into an amalgamated municipal area in 1915 only to be divided again in 1944 to form two separate municipalities. Uttarpara and Kotrung, originally two distinct municipalities established in 1865 and 1869 respectively, were united in 1964. These recent re-arrangements were no doubt called for to cope with the very rapid extension of a conurbation, the boundary of which has now extended far beyond the municipal limits due to accelerated industrial development and heavy influx of refugees from East Pakistan. The question of peri-urban administration thus comes into the picture. As many as four non-municipal tracts of the district, viz. Pandua, Singur, Tarakeswar and Nabagram have been classified as towns in the Census of 1961, for each possesses, *inter alia*, a density of not less than one thousand persons per square mile, a total population of at least five thousand, employment of three-fourths of the working population in non-agricultural activities

* All the municipalities are subject to the Bengal Municipal Act, 1932. But the Chandernagore Municipal Corporation is subject to the Chandernagore Municipal Act, 1955.

and some pronounced urban characteristics.[8] As the Bengal Municipal Act, 1932 takes such factors into consideration for creating new municipalities, establishment of new municipalities at these places may be looked forward to.[9]

Organization and structure of municipalities

The Commissioners

All powers under the Bengal Municipal Act, 1932, rest in the Commissioners of a municipality elected for a term of four years from constituencies known as wards. Until 1962, several Commissioners used to be elected from each ward. But under present arrangements, each ward forms a single-member constituency and elections on this basis have since been held in the Hooghly-Chinsura, Bansberia, Bhadreswar, Champdani, Baidyabati, Serampore, Konnagar and Arambagh municipalities.

The Chairman, Vice-Chairman

Responsible for the overall working of the municipality, the Chairman, elected from among the Commissioners, presides at all municipal meetings. Although vested with certain powers under Notification No. 6499M of November 21, 1935, the Vice-Chairman, who is also elected from among the Commissioners, usually performs the duties of the Chairman as delegated by him.

Executive Officer: Administrator

An Executive Officer may be appointed by the municipality while an Administrator is posted by the State Government to supervise the day-to-day administration of the local body when suspended. The Commissioners of the Baidyabati municipality have appointed an Executive Officer who acts under the general directions of the Chairman. At the moment, there are Administrators at the Chandernagore Municipal Corporation and the superseded Uttarpara-Kotrung municipality posted by the State Government.*

The Committee system

While the appointment of an Education Committee is mandatory under section 456 of the Act, the Commissioners usually appoint other Standing Committees as well for efficient transaction of business. According to the latest available information, the Serampore municipality has the largest number of Standing Committees, viz. six,† while the Bhadreswar, Uttarpara-Kotrung and Arambagh municipalities have none.

Municipal functions

Municipalities are agencies for local self-government under the Bengal Municipal Act, 1932. Their major functions extend to street lighting, construction and repair of roads and official buildings, water supply, drainage and conservancy services, night soil removal, running of dispensaries and maternity centres, ambulance services (not in all municipalities), vaccinations and inoculations, registration of births and deaths, supervision of markets, inspection of

* Through the Local Self-Government Department, the State Government may appoint an Executive Officer with special functions and may supersede the Commissioners with an Administrator appointed to exercise all their powers and functions. The department also exercises supervision through two Inspectors of Local Bodies.

† Building Committee, Public Health Committee, Medical Committee, Finance Committee, Public Works Committee and Rationalization Committee.

food and drugs, ferry services (not in all cases) and primary education (including grants-in-aid to other educational institutions and public libraries).

Administrative set-up

"In practice, the functions of a municipality are allotted to various departments or sections, one or more departments or sections being placed under a responsible officer. Usually, there is a General Department controlled by the Secretary of the municipality, assisted by a head clerk and one or more subordinates. Where there is no Secretary, such department is supervised by the Vice-Chairman or the Executive Officer, as the case may be. Municipalities also appoint an accountant for their accounts section, and some of them have combined the offices of accountant and head clerk. At the head of the Collection Department there is either a tax collector or a tax daroga, who usually also undertakes the work of the municipal cashier. Some municipalities employ licensing inspectors, assessment overseers, and registrars of births and deaths but generally these functions are carried out by persons otherwise employed by the municipality. In addition, technical heads are employed by the municipalities to operate the various major services, such as water supply, conservancy and roads."[10]

Public works

Roads form the major item of public works. Other items, such as buildings owned by the municipalities or parks and gardens, do not attract recurring expenditure and only a negligible portion of the municipal funds is spent on them, probably due to lack of finance. The following table gives the length of both pucca and kutcha roads maintained by the municipalities of the district during 1965-66.

Name of Municipality	Length of Roads (in km.) Kutcha	Pucca	Total
Hooghly-Chinsura	51	72	123
Bansberia	6	41	47
Bhadreswar	6	22	28
Champdani	8	36	44
Baidyabati	31	17	48
Rishra	3	18	21
Serampore	114	53	167
Konnagar	15	17	32
Uttarpara-Kotrung	24	24	48
Arambagh	14	15	29

Many of the roads have fallen into serious disrepair due to lack of municipal funds. "New road construction programmes of the municipalities form part of the State Five Year Plans, to which the State and municipal contributions for such purpose have been fixed at two-thirds and one-third respectively."[11]

Public safety (lighting)

Public safety should include fire fighting, but the lighting of streets and public places alone engages the attention of municipalities while the former continues to be the responsibility of the Directorate of Fire Services under the State Government which maintains Fire Stations and operates Fire Brigades. The following table gives the number of electric lights maintained by the municipalities of the district during 1965-66, their daily average consumption, and the sources of supply.

Municipality	No. of electric lights	Daily average consumption (kilowatts)	Source of Supply
Hooghly-Chinsura	Not available	746	East Indian Electric Supply & Traction Co. Ltd.
Bansberia	328	240	Do
Bhadreswar	750	315	Calcutta Electric Supply Corporation Ltd.
Champdani	1,024	476	-Do-
Baidyabati	1,242	556	-Do-
Rishra	762	630	-Do-
Serampore	1,600	753	C.E.S.C. Ltd. & West Bengal State Electricity Board
Konnagar	929	386	Calcutta Electric Supply Corporation Ltd.
Uttarpara-Kotrung	1,577	Not available	-Do-
Arambagh	288	,,	Not available

Public instruction

All the municipalities of the district maintain primary schools and extend grants-in-aid to similar other institutions and libraries. The following table provides relevant statistics for 1965-66.

Municipality	No. of Primary schools maintained	No. of Primary schools aided	No. of libraries aided
Hooghly-Chinsura	11	38	24
Bansberia	6	12	3
Bhadreswar	4	4	7
Champdani	2	13	4
Baidyabati	5	28	9
Rishra	4	7	10
Serampore	3	1	4
Konnagar	4	8	6
Uttarpara-Kotrung	2	11	12
Arambagh	Nil	15	1

Each municipality is supposed to appoint an Education Committee under Sec. 456 of the Act to supervise public instruction. Some of them have Education Officers to inspect the schools maintained by them. Where there is no Education Officer, the Secretary of the Education Committee undertakes both the day-to-day administrative functions and the work of inspection.

Health and sanitation

All the municipalities employ one or more qualified Sanitary Inspectors and maintain a Health and Sanitation Department. If there is no Health Officer, a Sanitary Inspector is placed in charge of this department dealing with medical services, inspection of markets and prevention of adulteration of food. In some municipalities, the Sanitary Inspector also looks after the drainage and conservancy services and in all of them he is in charge of vaccination and inoculation for which purpose he has under him one or more permanent vaccinators supplemented by seasonal staff. The following table gives the figures of vaccinations and inoculations undertaken by the various municipalities in the district during 1965-66.

Name of the Municipality	Primary vaccinations	Re-vaccinations	Inoculations
Hooghly-Chinsura	1,990	25,959	19,791
Bansberia	1,403	18,234	4,095
Bhadreswar	194	2,729	609
Champdani	2,721	21,514	16,456
Baidyabati	1,038	9,776	4,492
Rishra	771	11,761	4,159
Serampore	1,943	32,470	22,325
Konnagar	401	4,403	3,759
Uttarpara-Kotrung	681	14,670	10,025
Arambagh	1,968	6,429	5,422

The following is a brief account of other public health services rendered by the municipalities during 1965-66. The Hooghly-Chinsura municipality gave financial aid to one maternity centre managed by the District Red Cross Society. Bansberia municipality aided two outdoor dispensaries and Bhadreswar municipality directly managed one. Champdani municipality maintained one maternity hospital with 6 beds and also an outdoor dispensary for free treatment. Baidyabati municipality aided one outdoor charitable dispensary and Serampore maintained a full-fledged maternity hospital with 22 beds, a charitable dispensary and a family planning centre. Konnagar maintained one charitable dispensary, one maternity centre and a family planning clinic. Besides, centres for the treatment of rabies

were maintained by Hooghly-Chinsura, veterinary services were run by Konnagar, and Rishra had beds reserved in a hospital for its inhabitants. All municipalities undertake in varying extents sanitary measures like spraying of D.D.T. and spreading of Gammexin powder. Child welfare and school hygiene schemes are also carried out by them as funds permit. "It should be noted, however, that as most of the municipalities cannot afford to appoint a wholetime Health Officer, the quality and extent of these health and sanitation services need to be further examined. Enquiry may well confirm the impression that they are generally inadequate relative to the demands made upon them."[18] Collection of food and drug samples for detecting adulteration, inspection of markets, restaurants and slaughter houses, and registration of births and deaths fall within the responsibility of the Health and Sanitation Department.

Drainage and conservancy

All the municipalities maintained kutcha and/or pucca drains during 1965-66, the respective lengths of which are given below:

Name of Municipality	Length of Drains (in km.)		
	Kutcha	Pucca	Total
Hooghly-Chinsura	69	89	158
Bansberia	34	21	55
Bhadreswar	10	6	16
Champdani	6	21	27
Baidyabati	40	8	48
Rishra	5	16	21
Serampore	48	56	104
Konnagar	64	Nil	64
Uttarpara-Kotrung	86	29	115
Arambagh	0.87	1.27	2.14

Conservancy services are gradually being mechanized in the more important municipalities. Street scavenging and watering is also a municipal function and the street refuse is used either for filling in tanks and other low-lying areas or for making compost. Most of the privies are still of the service type and, although the construction of new service privies has been banned, the conversion of existing ones into sanitary, water-flushed privies is apparently a slow process. Night-soil is disposed of either in municipal trenching grounds or through sewage disposal schemes.

Burial grounds and burning ghats

The municipalities are generally content to keep an account of the disposal of the dead either by appointing their own men or by paying persons who effect the cremations and burials. They also provide for the disposal of pauper dead.

Water supply

Following is an account of the water supply arrangements maintained by the municipalities of the district during 1965-66. The Hooghly-Chinsura municipality had its waterworks at Khamarpara (Bansberia) with 3 settling tanks each having a capacity of 7,00,000 gallons, 4 sand-filter centres with a total area of 24,000 sq. feet and an underground reservoir with a capacity of 3,00,000 gallons. There were besides 7 deep tube-wells from which water was pumped to elevated reservoirs located at different points. The municipality ran 2,400 house connexions in all, the average daily supply of filtered water per head being 15 gallons. Bansberia had 4 deep tube-wells and an overhead reservoir with a capacity of 60,000 gallons, the local Ganges Jute Mills making available, on arrangement with the municipality, an additional quantity of 80,000 gallons. There were 648 house connexions and the daily average supply of filtered water per household amounted to 100 gallons. Bhadreswar having 159 house connexions, worked 6 turbine bore-hole motor pumps for effecting an average supply of 79,400 gallons of filtered water per day. Champdani municipality maintained a water supply plant with two overhead reservoirs having capacities of 80,000 and 1,00,000 gallons respectively and provided 33 house connexions with an average supply of 25 gallons of water per head per day. It had also a number of tube-wells for the areas not served by the reservoirs. Baidyabati operated a multitude of tube-wells for a better functioning of which the Calcutta Metropolitan Planning Organization has erected three reservoirs and the work of underground pipe laying is nearing completion. In addition to the maintenance of a number of tube-wells, a per capita supply of 20 gallons of piped water per day was made available by the Rishra municipality. Serampore had a Gravity Process filtration plant with 1,600 house connexions with an average daily supply of 1 million gallons. Konnagar provided 350 house connexions, Uttarpara-Kotrung maintained a water-works, and Arambagh had 203 tube-wells for supplying drinking water.

Besides the above, most of the municipalities maintained street taps but the supply of water is generally inadequate and its quality often poor. The Public Health Engineering Directorate of the Government of West Bengal and the Calcutta Metropolitan Planning Organization have come forward with certain schemes for augmenting the supply of filtered water.* In a recent report, the World Health Organization has voiced a recommendation that there should be an overall authority for ensuring better supply of water in this entire conurbation region.[13]

Municipal finances

Before dealing with municipal finances, a brief reference may be made to the population : rate-payers ratio obtaining in the various

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* Details of these schemes have been given in Chapter XIV.

municipalities of the district during 1965-66 given in the following table.*

Name of Municipality	Population	No. of Rate-payers	Percentage of Col. 3 to Col. 2
Hooghly-Chinsura	83,104	13,700	16
Bansberia	45,463	5,043	11
Bhadreswar	35,489	3,600	10
Champdani	42,129	3,806	9
Baidyabati	44,312	7,944	18
Rishra	38,535	3,200	8
Serampore	91,521	8,500	9
Konnagar	29,443	4,000	14
Uttarpara-Kotrung	52,163	8,032	15
Arambagh	16,551	2,561	15

Besides rates and taxes, the main sources of municipal revenue are (a) realizations under special Acts, (b) revenue derived from municipal property etc., (c) grants from the Government and other bodies and (d) income from miscellaneous items. Extraordinary items like loans, advances and deposits also figure prominently in the finances of municipalities. Major heads of expenditure are (a) general administration and collection charges, (b) public safety, (c) public health and convenience, (d) public works, (e) public instruction and (f) other miscellaneous items. The following table gives a comprehensive picture of the income and expenditure position of the municipalities of the district for the year 1965-66.

Name of Municipality	Population	Total ordinary income (Rs.)	Per capita income (Rs.)	Total ordinary expenditure (Rs.)	Per capita expenditure (Rs.)
Hooghly-Chinsura	83,104	12,54,407	15.09	11,57,000	13.92
Bansberia	45,463	4,41,478	9.71	4,62,681	10.18
Bhadreswar	35,489	4,34,270	12.24	4,86,457	13.71
Champdani	42,129	5,86,291	13.92	6,66,082	15.81
Baidyabati	44,312	—	—	—	—
Rishra	38,535	5,45,452	14.15	6,13,914	15.93
Serampore	91,521	9,76,430	10.67	8,23,401	9.00
Konnagar	29,443	4,19,402	14.24	7,23,562	24.58
Uttarpara-Kotrung	52,163	5,43,784	10.42	5,79,008	11.10
Arambagh	16,551	2,49,946	15.10	3,38,691	20.46

* Population figures have been taken from Census of India, 1961, Vol. XI : West Bengal and Sikkim, Part II-A: General Population Tables. Calcutta, 1964. Figures of rate-payers have been collected from the municipalities concerned.

Arambagh has the highest per capita income of Rs. 15.10 per annum while Bansberia has the lowest with Rs. 9.71. To Konnagar goes the credit of the highest per capita expenditure of Rs. 24.58 while Serampore touches the bottom with Rs. 9.00 only.

The Chandernagore Municipal Corporation

On the merger of the former French territory of Chandernagore with the Indian Union, Jha Commission, appointed by the Government of India to report on its future administration, recommended, *inter alia*, the establishment of a municipal corporation for the town. The Chandernagore Municipal Corporation was thus established under the Chandernagore Municipal Act, 1955 but the body is also subject to the Bengal Municipal Act, 1932 in matters not provided for in the former Act.

Organization and functions

"The Act provides for a corporation consisting of twenty-two councillors and three aldermen. The councillors are elected for four years by adult suffrage, and the aldermen are elected by the councillors. The corporation elects from among its members a mayor and a deputy mayor for a term of one year, and they are not eligible for re-election for more than two terms. The mayor, or in his absence the deputy mayor, presides over the meetings of the corporation. Generally speaking, the powers and functions of these two officers are the same as those of a chairman and vice-chairman under the Bengal Municipal Act, 1932. Although only the appointment of an education committee under Sec. 456 of the Act is mandatory, the corporation appoints other committees on the pattern of those found in the thirty-two municipalities.

"Sec. 65A of the Act requires the corporation to appoint a person to be its chief executive officer and to fix his salary, allowances and terms of service, subject to the State Government's approval. A health officer, an education officer, an overseer, a head clerk, an accountant and a cashier are also employed by the corporation."[14]

Statutory relations with the State Government

"The West Bengal Government is required to contribute at least Rs. 25,000 per annum to the Corporations Poor Fund. The financial responsibility for the addition to, or extension, alteration or repair and maintenance of, school buildings in Chandernagore is divided between the Corporation and the West Bengal Government."[15]

On the supersession of the Corporation on February 2, 1962, an Administrator was appointed by the State Government. Only two statutory committees are functionining now, viz. the Education and the Poor Fund Committees. During 1965-66 the Corporation maintained 23.2 kms. (14.4 miles) of asphalt and 53.2 kms. (33.1 miles) of metalled roads. Four mechanized transport and 12 bullock carts were used for removal of refuse. Watering of roads was also done by some mechanized vehicles. A number of supervisors and sweepers was employed by the Corporation for the maintenance and cleaning of roads. A scheme for the augmentation of water supply is nearing completion. It aims at increasing the supply capacity of filtered

water from the existing 9 lakh gallons to 38.4 lakh gallons. Seven deep tube-wells and four pumping units have already been installed and the pipe laying operation is expected to be over by the end of 1967. Of the estimated expenditure of Rs. 33,45,300, two-thirds will be borne by the State Government and the rest by the Corporation. When fully commissioned, the project is expected to meet the requirements of the town for many years to come. Besides maintaining a number of 1½" dia. tube-wells, the Corporation has already installed 3,105 house connexions and 260 street taps.

"As regards drainage and sewerage, there are 75 miles of kutcha and 8 miles of pucca drains within the municipal area, but there is no system of water-borne sewerage, and service privies far out-number sanitary privies. A sewerage system costing approximately Rs. 75,00,000 was thus recommended by the Jha Commission and is now awaiting State approval. Conservancy services are partially mechanized, and other measures of health and sanitation, such as the spreading of disinfectants, vaccinations and inoculations, and the disposal of pauper dead, are also undertaken by the Corporation."[16]

The Corporation maintains two burning ghats for the Hindus, two burial grounds for Muslims and one for Christians. Shops, restaurants etc. are under regular inspection by the sanitary staff. There are 5 municipal markets, one slaughter house and 2 latrines and 10 urinals for the use of the public.

During 1965-66 the Corporation ran 4 higher secondary multipurpose schools, 3 junior schools and 7 primary schools besides aiding 20 literary societies and 55 physical culture institutions. It also maintained a large play-ground and a children's park. The Poor Fund, initiated by the Administrator of Chandernagore before the commencement of the Act, plays an important role in the progress of the town and the State Government is statutorily required to make an annual contribution of not less than Rs. 25,000 to it. In 1965-66 the Corporation maintained 1,390 electric street lights and 220 kerosene street lamps.

The tables below furnish figures of receipts and expenditure of the Corporation for 1955-56 and 1965-66.

TABLE I

Heads of Receipt	1955-56 (Rs.)	1965-66 (Rs.)
Municipal rates & taxes	1,87,456	4,95,863
Realization under special Acts	708	312
Revenue derived from municipal property & powers apart from taxation	58,136	2,13,272
Grants & contributions for general & special purposes	36,404	8,92,585
Miscellaneous	4,667	19,080
Extraordinary & debts	41,891	1,12,594

TABLE II

Heads of Expenditure	1955-56 (Rs.)	1965-66 (Rs.)
General administration & collection charges	67,509	1,77,730
Public safety	42,128	49,503
Public health & convenience	2,84,540	6,20,338
Public instruction	2,000	8,20,428
Contributions	24,980	26,557
Miscellaneous	5,435	36,497
Extraordinary & debts	17,986	1,13,784

The District Road Cess Committee

The Hooghly District Road Cess Committee, with the Collector as its Chairman, came into existence under Act X of 1871. One-third of its members were Government officials and two-thirds were nominated by Government from among the cess payers. It was responsible for fixing the rates of road cess and the building and maintenance of roads in the district. With the passing of the Local Self-Government Act of 1885 which provided for the establishment of a District Board, the tenure of the Committee came to an end.

The District Board

To start with, one-third of the members of the District Board continued to be officials while two-thirds were elected by the cess payers from among themselves. In addition to the responsibilities of the erstwhile Road Cess Committee, welfare functions like education, medical, relief, water-supply, sanitation, vaccination etc. were entrusted with the Board. Mr. G. Toynbee, I.C.S., Collector of Hooghly, became its first chairman and its inaugural meeting took place on 27.1.1887. On the 16th of July 1889, the Board entered into an agreement with Messrs Walls Lovett & Co., a firm of engineers, for the construction of a railway from Howrah to Sheakhala. The present Howrah-Sheakhala Light Railway was thus launched. Shortly afterwards, the Government of India, on a recommendation from the provincial Government, decided to transfer the work of the then Executive Engineers to the District Engineers serving under the District Boards. Accordingly, the maintenance and repairs of all provincial buildings in the district, which were under the Executive Engineer of the Burdwan Division, and of imperial buildings, such as Post and Telegraph offices, were entrusted to the District Engineer in 1892-93, the necessary funds being transferred to the Board at the same time. During 1893-95, the Board took over the dispensary at Mandlai, opened two new dispensaries and contributed Rs. 1,000 to the Lady Dufferin Hospital at Chinsura. A few agricultural and industrial exhibitions were held at Chinsura between 1906 and 1910 to popularize modern methods of production. In 1918-19 the Board employed a number of doctors to visit the countryside for rendering

free medical relief and instructing the villagers in health and sanitation. This was followed up in 1919-20 by a scheme for subsidizing medical practitioners in the rural areas. In 1920, following the amendments made to the Bengal Local Self-Government Act of 1885, the Board had for the first time its elected and non-official chairman in the person of Shri Barada Prasad De, B.L., an eminent lawyer and zemindar of Serampore. Since 1923-24, the Board carried out certain water-supply schemes in the outlying areas of the district through the agency of Local Boards and Union Boards and spent Rs. 17,148 in 1924-25 for sinking tube-wells, masonry wells and ringwells and 40.3 per cent of the public works cess receipts in 1925-26 on water-supply. In 1927, it took a loan of Rs. 1 lakh from the Government for implementing a comprehensive tube-wells scheme in the rural areas, the results of which proved very successful. In 1927 a rural public health organization came into existence in Bengal and its administration in Hooghly district was vested in the Hooghly District Board. With a donation of Rs. 95,000 received from Sm. Swarnaprobha Mallick, widow of Sir S. N. Mallick, the Board started the S. N. Mallick Maternity and Child Welfare Clinic at Singur in March, 1939. The Second World War affected the Board heavily because of the stoppage of Government grants out of the motor vehicles tax receipts and the simultaneous damage done to its roads by increased vehicular traffic. Following the abolition of nominated seats, the Board was re-constituted with 20 elected members after five months of the Indian independence. The next re-constitution came in August, 1948 with 26 elected members representing the 26 constituencies into which the jurisdiction of the Board was delimited. The Estates Acquisition Act of 1953 also affected the Board to some extent as during the initial years of its operation, the realization of arrears and current cesses dropped. The contribution to the Board's fund from Public Works Cess was stopped in 1959-60 and the body was replaced by the Zilla Parishad with effect from October 2, 1964.

The District Board during 1963-64

During 1963-64, the last working year of the District Board, it had 8 Standing Committees on Education, Health, Finance, Public Works, Union Boards, Appointments, Legal Affairs and Arboriculture. It maintained during the same year 32 miles of metalled and 944 miles of unmetalled roads, 35 bridges, 46 culverts and 5 masonry wells and re-sunk 34 tube-wells. In the field of public health, the Board ran 18 homoeopathic, 5 allopathic and 1 ayurvedic dispensaries and aided 36 Union Board dispensaries, 2 T.B. clinics, 1 homoeopathic dispensary, 1 mental hospital and 1 social welfare institution. Besides, it bore the expenses of 6 beds at the Serampore T.B. Hospital, 3 at the Mankundu Mental Hospital and 1 at the Lady Dufferin Hospital. The educational institutions helped by the Board numbered 15 junior high schools, 4 *madrasas*, 49 night schools, 33 *chatuspathis* and 74 public libraries. It also awarded stipends to 21 students of

technology, 3 of textile technology, 2 of engineering, 1 of veterinary science and 1 of medicine.

The following table gives an account of the income and expenditure of the Hooghly District Board during the financial year 1963-64:

Income Head	Amount (Rs.)	Expenditure Head	Amount (Rs.)
Local rates & cesses	1,03,103	General Administration	53,456
Govt. grants & contributions	2,77,754	Education	31,140
Civil Works	42,338	Medical & Public Health	1,19,418
Miscellaneous	57,136	Civil Works	2,87,848
Total ordinary income	4,80,331	Miscellaneous	44,604
		Total ordinary expenditure	5,36,466

Local Boards

As ancillary agencies of the District Board, three Local Boards were constituted in the district under Act III of 1885, one for each subdivision with the respective Sub-divisional Officers as their Chairmen. Maintenance of roads, management of primary education and ferries and supervision of sanitation were mainly entrusted to them. They were considered redundant and abolished in 1945.

Union Boards

Union Boards came into existence under the Bengal Village Self-Government Act of 1919 with an average population of 10,000 persons living in a number of villages. Hooghly had 129 Union Boards of which 49 were in the Sadar subdivision, 20 in Serampore, 40 in Arambagh and 20 in Chandernagore. Each Board consisted of 6 to 9 members elected for a term of four years, the exact number being fixed by the State Government. Rural policing through *dafadars* and *chowkidars* and supervision of sanitary and conservancy services were the main functions of these Boards. Maintenance of their own roads, bridges and waterways, undertaking street lighting and small irrigation projects, fostering of cottage industries, running of dispensaries and primary schools and aiding public libraries were some of the optional functions of the Union Boards. Union rate and grants and contributions from the Government, the District Board and other sources were their main sources of income while administration, roads, public health and sanitation, lighting and water supply accounted for most of the expenditure. Almost all the Union Boards in the district have since been replaced by Anchal Panchayats set up under the West Bengal Panchayat Act of 1956.

Zilla Parishad

In pursuance of the general policy of democratic decentralization formulated by the Union Government, the Government of West Bengal passed the West Bengal Zilla Parishads Act of 1963 under which the Hooghly Zilla Parishad, having jurisdiction over the whole of the district except the areas covered by the Chandernagore Corporation and the municipalities, was established on October 2, 1964. A body corporate with consequent rights and duties, the Parishad

had 56 members in 1965-66, of whom 54 were males, 2 females and 2 of the Scheduled Castes. The four Subdivisional Officers and the District Panchayat Officer were associate members.*

The Standing Committees

During 1965-66 the Zilla Parishad, besides having a Chairman and a Vice-Chairman generally to look after all administrative matters, had a number of Standing Committees to attend to specific subjects. Their names, the subjects dealt with and the number of meetings held by each during the year under review are given in the following table:

Name of Standing Committee	Subjects dealt with	No. of meetings held in 1965-66
Finance & Establishment	Finance, budget, taxation, administration, establishment, planning, co-ordination & supervision	13
Public Health	Public health, sanitation, nutrition, rural water, dispensaries, hospitals, family planning	12
Public Works	Roads, bridges, culverts, construction and maintenance of public buildings, works & properties, rural housing	11
Agriculture & Irrigation	Agriculture, food production, irrigation, forests, fisheries, animal husbandry, poultry, veterinary services	14
Industry & Co-operation	Marketing, ware-housing, food-processing, co-operative societies, rural credit, small savings, cottage industries	14
Public & Social Welfare	Social education, recreation, social welfare including welfare of women, children and backward communities, tribal welfare, adult education, information and mass communication, publicity & statistics	15

*"The members and associate members will normally hold office for a period of four years, and, apart from the associate members, the following persons will be members of a zilla parishad:

"(*i*) the presidents of anchalik parishads of the development blocks within the district, *ex officio*;

"(*ii*) two adhyakshas (presidents) of gram panchayats, elected by the adhyakshas from among themselves, one from each of the two constituencies into which each sub-division is to be divided;

"(*iii*) members of the Union House of the People or State Legislative Assembly whose constituencies comprise the district or any part thereof, and who are not Ministers;

"(*iv*) members of the Union Council of States or State Legislative Council, not being Ministers and having a place of residence in the district;

"(*v*) the chairman of a municipality or mayor of a municipal corporation in the district, to be appointed by the State Government;

"(*vi*) the president of the district school board, *ex officio*; and

"(*vii*) two women having a place of residence in the district, to be appointed by the State Government.

"The State Government will thus have at least three nominees on zilla parishad, in addition to the officials who will be associate members. The rest of the members will be either indirectly elected or enjoy membership *ex officio*. Thus, a zilla parishad will link together a number of bodies, viz., gram panchayats, anchal panchayats, anchalik parishads, municipalities, district school boards, the State Legislature and even the Union Parliament." : Mohit Bhattacharya—Calcutta Research Studies, No. 5: Rural Self-Government in Metropolitan Calcutta. New York, 1965. pp. 22-23.

The Secretary

The District Panchayat Officer is to function as the *ex officio* Secretary of the Zilla Parishad for four years after its establishment. He is responsible through the Chairman to the Zilla Parishad and its Standing Committees in all matters relating to the budget, loans, expenditure, receipts, fines and penalties, custody of Parishad's fund in the Government's treasury, contributions and grants received from the Government or any local authority, creation of posts and framing of by-laws. He prepares the annual budget in consultation with various district-level officers and submits it to the Finance and Establishment Committees with whose recommendations it goes to the State Government through the Zilla Parishad. He is assisted by an Executive Officer who signs all important correspondence of the Parishad with the State Government and inspects the working of the Zilla and Anchalik Parishads.

The Executive Officer

The Executive Officer of the Parishad is appointed by the State Government but is removable by a resolution of not less than two-thirds of the members of the Parishad. He works under the administrative control of the Chairman but is also responsible for complying with any directive given by the Secretary. Usually, all correspondence of the Parishad and its Standing Committees (other than that allocated to the Secretary) is carried on by him and the records and accounts are placed in his charge. The administration of the office rests with him and he secures co-ordination between the Parishad, its Standing Committees and the district level officers.

Balance-sheet for 1965-66

The following balance-sheet will indicate the financial position of the Hooghly Zilla Parishad for the year 1965-66.

Income		Expenditure	
Head	Amount (Rs.)	Head	Amount (Rs.)
Provincial rates or cess on lands	1,13,415	General administration	71,511
Govt. grant in lieu of tenants' & ex-landlords' cesses	2,69,933	Law & Justice	6,459
		Education	52,426
5% of the average of last 3 years' collection of current land revenue demand	1,73,000	Medical	1,77,051
		Public Health	448
Law & Justice	80	Superannuations, allowances & pensions	22,195
Education	19,528	Stationery & printing	4,775
Medical	46,930	Miscellaneous	7,677
Public Health	831	Famine Relief	7,90,132

(contd.)

Income		Expenditure	
Head	Amount (Rs.)	Head	Amount (Rs.)
Miscellaneous	8,46,757	Civil Works	4,22,713
Civil Works	1,58,626	Deposits	15,852
Railways	1,142	Advances	13,358
Deposits	7,082		
Advances	16,477	Total	15,34,570
Total receipts excluding opening balance	16,53,801	Closing balance	2,58,133
Opening balance	1,88,902		
Total	18,42,703	Grand Total	18,42,703

Government grants

Broadly speaking, the establishment of the Zilla Parishads stems from a long-felt need for democratic decentralization of the administration for achieving, with people's participation, better results in the execution of the various developmental plans of a welfare State. "In such case, the establishment of a system of regular Government grants geared to the development needs of National and State planning, becomes of first importance."[17] This emended approach is reflected in the widely varying amounts spent by the Government through the erstwhile District Board and the present Zilla Parishad. Against a total Government grant of Rs. 2,77,754 given to the District Board in 1963-64, the corresponding amount received by the Zilla Parishad in 1965-66 was Rs. 12,83,606. The following table gives a break-up of the latter figure mentioning the specific purposes for which the money was intended to be spent.

Amount of Grant (Rs.)	Purpose for which to be spent
13,500	For sinking and re-sinking of tube-wells
9,000	For purchase of spare-parts for repairing tube-wells
50,000	For improving 200 tanks
3,10,640	For improving derelict and semi-derelict tanks
81,445	For development of tank fisheries in 7 C.D. Blocks
22,000	For 300 night schools for adult education in the rural areas
2,021	For 21 one-teacher *pathsalas* where Scheduled Castes and Scheduled Tribes students are increasing
5,000	For purchasing 2 pumping sets
40,000	For repairs to the Boro Bundh
7,50,000	For distribution to the needy as per West Bengal Famine Rules

During the same year (1965-66), the Hooghly Zilla Parishad made a total grant of Rs. 86,734 from its own revenues for various welfare measures of which Rs. 37,264 was spent for giving stipends to deserving students in different technical institutions, Rs. 18,600 for the treatment of rural people in certain hospitals in the district and Rs. 11,700 for assisting 102 village libraries.

Anchalik Parishads

As intermediate authorities between the Zilla Parishad at the district level and the Anchal Panchayats and Gram Panchayats at the union and village levels, 17 Anchalik Parishads, each covering the area of a Block, are functioning in the district. Of these, 5 are in Sadar, 3 in Chandernagore, 4 in Serampore and 5 in Arambagh subdivision. A body corporate with consequent rights and duties, every Anchalik Parishad consists of several members and an associate member, the latter being the Block Development Officer who has no right to vote. The Pradhans of the Anchal Panchayats within the block are the *ex officio* members of the Anchalik Parishad. The Adhyakshas of Gram Panchayats lying within the territorial jurisdiction of each Anchal Panchayat elect one amongst them to become a member of the Anchalik Parishad. The members of the Union House of People, State Legislative Assembly, Union Council of State and State Legislative Council having a place of residence within the jurisdiction of the Anchalik Parishad automatically become its members. Besides, the State Government appoints two women and two persons belonging to backward classes and fulfilling the same residential qualification. The members ordinarily hold office for a period of four years and elect for the same period a President and a Vice-President from among themselves. Each Anchalik Parishad works through several standing committees on finance and establishment, public health, public works, agriculture and irrigation, industry and co-operation, public and social welfare, and primary education. The power to co-ordinate and integrate the developmental activities of the Anchal Panchayats within the Block area has vested with the Anchalik Parishads which also exercise general supervisory powers over Anchal and Gram Panchayats falling under them. Each Anchalik Parishad maintains a fund to which are credited contributions, grants or loans given by the Union or the State Government and the Zilla Parishad and all receipts on account of tolls, rates and fees levied by it and from this fund the Parishad incurs its diverse expenditure.

The following table indicates the total receipts and disbursements of each Anchalik Parishad in Hooghly district for the year 1965-66.[19]

Name of Subdivision	Name of Anchalik Parishad	Total Receipts (Rs.)	Total Disbursements (Rs.)
Sadar	Chinsura-Magra	1,73,644	1,04,600
	Polba-Dadpur	85,483	63,763

Name of Subdivision	Name of Anchalik Parishad	Total Receipts (Rs.)	Total Disbursements (Rs.)
	Dhaniakhali	68,099	43,691
	Balagarh	92,538	63,343
	Pandua	1,06,674	89,713
Chandernagore	Singur	2,21,105	2,980
	Haripal	49,046	32,605
	Tarakeswar	76,617	48,482
Serampore	Serampore-Uttarpara	78,174	53,804
	Chanditala-I	83,365	68,930
	Chanditala-II	94,262	71,280
	Jangipara	99,870	97,568
Arambagh	Arambagh	96,729	64,259
	Khanakul-I	85,762	53,264
	Khanakul-II	69,255	51,859
	Pursura	36,960	16,199
	Goghat	95,718	50,185

Anchal Panchayats

An Anchal Panchayat covers more or less the area of an old-time Union Board and comprises from 8 to 10 contiguous Gram Panchayats. Its members are elected from among the members of the Gram Sabhas in the ratio of one member for every 250 members of the Gram Sabhas. The members of an Anchal Panchayat, who hold office for four years, elect a Pradhan and an Upapradhan from among themselves. Appointed by the State Government but directly responsible to the Pradhan, the Secretary of an Anchal Panchayat is in general charge of its day-to-day business and prepares its budget estimates, annual statement of accounts, and an annual statement of the work to be executed next year. Each Anchal Panchayat administers a fund to which is credited contributions made by the State Government as also any tax, toll, fee or rate levied and collected by it under the Act. The table below indicates the number of Anchal Panchayats in each Block of Hooghly district along with their Block-wise combined receipts and disbursements for 1965-66[19]

Name of Block	No. of Anchal Panchayats	Combined Receipts for 1965-66 (Rs.)	Combined Disbursements for 1965-66 (Rs.)
Chinsura-Magra	6	24,868	12,721
Polba-Dadpur	12	—	—
Dhaniakhali	12	1,70,521	1,58,912

Name of Block	No. of Anchal Panchayats	Combined Receipts for 1965-66 (Rs.)	Combined Disbursements for 1965-66 (Rs.)
Balagarh	7	74,285	60,058
Pandua	16	1,84,173	1,60,538
Singur	15	—	—
Haripal	15	1,00,131	91,378
Tarakeswar	9	1,40,086	1,22,734
Serampore-Uttarpara	6	56,886	50,127
Chanditala-I	9	95,088	78,765
Chanditala-II	9	92,055	82,568
Jangipara	9	74,625	70,461
Arambagh	8	91,997	70,655
Khanakul-I	9	79,812	70,714
Khanakul-II	8	55,650	35,391
Pursura	7	70,844	54,915
Goghat	15	59,910	50,283

Gram Panchayats

Under the West Bengal Panchayat Act, 1956, the Gram Panchayats and the Anchal Panchayats constitute the two lowest tiers of Panchayati Raj in West Bengal. As the executive body of the Gram Sabha covering a specified rural area with a population ranging from 750 to 1,500, every Gram Panchayat consists of not less than 9 and not more than 15 members, including an Adhyaksha and an Upadhyaksha, elected by the members of the Gram Sabha from among themselves. Normally, the members hold office for four years. Every Gram Panchayat has a fund to which are credited the sums assigned to it under the provisions of the Panchayat Act as also any gifts or contributions received and income from endowments and trusts made in its favour. The table below indicates the number of Gram Panchayats in each Block of Hooghly district along with their Blockwise combined receipts and disbursements for 1965-66.[20]

Name of Block	No. of Gram Panchayats	Combined Receipts for 1965-66 (Rs.)	Combined Disbursements for 1965-66 (Rs.)
Chinsura-Magra	37	24,868	17,721
Polba-Dadpur	75	—	—
Dhaniakhali	91	83,239	72,738
Balagarh	43	27,849	23,950
Pandua	110	42,128	39,629
Singur	104	—	—

Name of Block	No. of Gram Panchayats	Combined Receipts for 1965-66 (Rs.)	Combined Disbursements for 1965-66 (Rs.)
Haripal	105	17,945	14,320
Tarakeswar	60	78,034	74,782
Serampore-Uttarpara	33	18,326	12,931
Chanditala-I	75	22,205	19,591
Chanditala-II	47	42,391	37,405
Jangipara	67	35,824	29,046
Arambagh	74	32,624	19,965
Khanakul-I	60	30,674	19,674
Khanakul-II	45	8,806	5,388
Pursura	40	18,765	12,239
Goghat	89	—	—

Functions of Panchayati institutions

The functions of the Panchayati institutions may be broadly classified into four groups: civic, social, economic and police. The civic functions include village sanitation, public health, water-supply, maintenance of buildings, regulation of transport, collection and disposal of refuse, filling up of unused wells and unsanitary pools, prevention of pollution of water-sources, regulation of slaughter houses and markets, and upkeep of village roads and waterways. The social functions comprise duties in respect of education, physical culture and recreation grounds, conduct of fairs and festivals, encouragement of folk drama and dancing, establishment of museums, reading rooms, libraries etc. The economic functions consist of supply of agricultural implements and improved seeds to cultivators, improvement of livestock, better organization of cottage industries, introduction of co-operative farming and setting up of co-operative stores etc. The police functions are performed through dafadars and chowkidars whose duties include watch and ward, prevention of crimes, protection of life and property etc. The number of dafadars and chowkidars under each Anchalik Parishad in the district along with the contributions made by the State Government towards their maintenance are shown in the table below.[31]

Name of Anchalik Parishad	Sanctioned strength of dafadars for 1965-66	Sanctioned strength of chowkidars for 1965-66	Govt. subvention towards their salaries for 1965-66 (Rs.)
Chinsura-Magra	4	26	11,200
Polba-Dadpur	12	84	16,295
Dhaniakhali	12	105	17,688
Balagarh	9	59	9,074

Name of Anchalik Parishad	Sanctioned strength of dafadars for 1965-66	Sanctioned strength of chowkidars for 1965-66	Govt. subvention towards their salaries for 1965-66 (Rs.)
Pandua	16	113	21,473
Singur	16	112	18,817
Haripal	15	103	18,290
Tarakeswar	10	59	10,699
Serampore-Uttarpara	3	25	2,595
Chanditala-I	8	56	10,481
Chanditala-II	11	59	6,108
Jangipara	9	102	15,864
Arambagh	10	78	14,490
Khanakul-I	9	62	12,092
Khanakul-II	8	55	8,832
Pursura	7	44	9,257
Goghat	17	137	22,700

Although the dafadars and chowkidars are, in reality, controlled by the Anchal Panchayats, their sanctioned strength and the State Government's subvention towards their salaries have been shown in the above table against the Anchalik Parishads of which the Anchal Panchayats are constituent members.

NOTES

1 George Toynbee—A Sketch of the Administration of the Hooghly District from 1795 to 1845. Calcutta, 1888. p. 123.
2-3 ibid. p. 124.
4 Shumbhoo Chunder Dey—Hooghly Past and Present. Calcutta, 1906. pp. 359-60.
5-7 J. Datta Gupta—Census of India, 1961. Vol. XVI. West Bengal and Sikkim. Part II-A: General Population Tables. Calcutta, 1964.
8 Census of India, Paper No. 1 of 1962. 1961 Census, Government of India, XXXVII.
9 For a comprehensive study in peri-urban administration in the Calcutta Metropolitan District, one may consult Calcutta Research Studies No. 5: Rural Self-Government in Metropolitan Calcutta by Mohit Bhattacharya. New York, 1965. pp. 84-99.
10 M. M. Singh—Calcutta Research Studies, No. 2: Municipal Govt. in the Calcutta Metropolitan District: A preliminary Survey. Calcutta, 1963. p. 7.
11 M. M. Singh—op. cit. p. 7.
12 M. M. Singh—op. cit. p. 9.
13 Assignment Report on Water-Supply and Sewage Disposal, Greater Calcutta W.H.O. Project, W.H.O. Regional Office for South-East Asia, 1960.
14 M. M. Singh—op. cit. p. 31.
15 M. Bhattacharya, M. M. Singh and Frank J. Tysen—Calcutta Research Studies, No. 1: Government in Metropolitan Calcutta: A Manual. New York, 1965. p. 124.
16 M. M. Singh—op. cit. p. 32.
17 Mohit Bhattacharya—Calcutta Research Studies No. 5: Rural Self-Government in Metropolitan Calcutta. New York, 1965. p. 74.
18-21 Source: All Block Development Officers of Hooghly district.

CHAPTER XIII

EDUCATION AND CULTURE

Historical background

Historical evidence about the existence of educational institutions in the district during the Hindu period is singularly lacking. From the indirect testimony of sculptures and architectural remains attributable to the Pala and Sena periods found in and around Saptagram, Tribeni, Pandua, Mahanad and Garh Mandaran, it may be inferred that there were centres of learning at those places. Beyond this nothing can be surmised about the modes of imparting education or the dissemination of culture in the pre-Muslim period of the recorded history of the district.

Early centres of Islamic learning

On the other hand, we have definite information about educational and cultural institutions in the district since the early days of Turko-Afgan rule from the accounts left by Muslim historians as also from epigraphic evidence. Inscriptions testify to the establishment of at least three *madrasahs* within the area now comprised in the Hooghly district. In 698 A.H. (A.D. 1298) a *madrasah* was built at Tribeni in the reign of Sultan Rukn-uddin Kaikaus.[1] The relevant inscription is fragmentary but it mentions one Quadi al-Nasir Muhammad known as 'Quadi, the tiger', who spent large sums of money for promotion of education and calls upon the people by saying: "you should acquire knowledge, for its acquisition is verily submission, its search is devotion, its discussion is glorification." Education is compared to "a shield that can avert such evils as cannot be avoided with the help of a shield-bearer." The Quadi also granted substantial stipends to "men of learning for inculcation of the Muslim law," and "to manifest the divine faith among the haughty."[2] A second *madrasah* was built in the same place in 713 A.H. (A.D. 1313) in the reign of Shams-uddin Firuz Shah by Shihabuddin Zafar Khan, Khan-i-Jahan, the feudatory of Sultan Shams-uddin Firuz in Satganw. The *madrasah* was known as Dar al-Khayrat (the house of benevolence).[3] A third *madrasah* was built at the same locality at the instance of Sultan Alauddin Husain Shah in 907 A H. (A.D. 1502).

Though there is no epigraphic or documentary evidence to prove the antiquity of the *madrasahs* and *maktabs* at Furfura and Sitapur in Jangipara P.S. and Kaswara in Polba P.S., local tradition at Furfura dates the establishment of a centre of Muslim learning in the late 14th century or the early 15th century.* Sitapur and Kaswara as centres of Islamic learning flourished probably in the middle of the 15th century. The antiquity of another *madrasah* at Dasghara in Dhaniakhali P.S. (which has since been converted into

* See Chapter III, Section on Religion and Chapter II, Section on Medieval History.

a secular High School) appears to go back to about 250 years. "Generally these *madrasahs* were built by the side of the mosques or mosques were invariably built in the *madrasahs*."[4] In the distant interior where only mosques were built, they served the joint purposes of a *masjid* and a *maktab*.

Centres of Sanskrit Learning

From the organization and curriculum of the educational institutions of non-Muslims in the post-Muslim period it may be reasonably inferred that *pathsalas* and *tols* catered for their educational needs even before the advent of the Muslims. During the Muslim period pupils were usually from Brahmin, Kayastha, Vaidya, Chhatri and the *Nabasakha* trading castes like Gandhavanik, Tambulivanik etc. Untouchable castes were neither capable of nor allowed to send their children to these institutions run by Brahmin teachers. Some *tols* and *chatuspathis* catered for higher education and specialized in *vyakarana* (grammar), *nyaya* (logic), *kavya* (poetics), *sahitya* (literature) etc. The pupils were usually upper caste Brahmins. Sakadwipi and/or Acharya Brahmins studied in *tols* and *chatuspathis* which specialized in *jyotisha* (astrology) and *ganita* (mathematics). Both Brahmins and Kayasthas took lessons in *smriti* (law) but Baidyas were in a majority in the *tols* and *chatuspathis* teaching *ayurveda* (medicine). There were also informal schools for imparting vocational training to the *Nabasakha* artisan castes. Since the Muslim period, right up to the year 1836 when Persian ceased to be the court language,[5] more and more Kayasthas were learning Persian for serving the State.

These institutions were maintained either from the proceeds of rent-free lands donated to the pundit families running them or through joint contributions made by the community. The oldest seat of Sanskrit learning in the district appears to be Khanakul-Krishnanagar elevated to prominence by Kanad Tarkabagish who was born around A.D. 1460-70 somewhere in Nadia district and after completing his lessons in *nyaya* (logic) under the famous scholar Raghunath Shiromoni of Nabadwip settled here in the first decade of the 16th century. His son Ratneswar Bhattacharyya Nyayabagish and a later descendant Haradas Tarkalankar, who flourished during the closing decades of the 19th century, were illustrious scions of the family.[6] In the middle of the 17th century Narayan Thakur, a renowned scholar of *smriti* (Hindu law) came to reside at Khanakul-Krishnanagar at the behest of Bansidhar Roy, the zemindar of the place. He prepared a learned commentary on certain aspects of Hindu law which came to be esteemed as the version of Khanakul-Krishnanagar; it has guided for the last three centuries the socio-religious behaviour of Hindus inhabiting extensive areas in south-western Bengal.

Guptipara's reputation as a centre of Sanskrit learning dates back to the middle of the 16th century.[7] To the many scholars belonging to the local Chiranjiva, Chaitalchatto, Bandyo, Sobhakar and

Vaidik families came advanced students from distant places to study *nyaya* (logic), *smriti* (law), *darshana* (philosophy) and *vedanta* (Upanishadic philosophy). Son of Satabadhan Bhattacharya, Chiranjiva, who flourished in the beginning of the 17th century, was, like his father, a scholar in several fields of learning. His lineage, known as the Chiranjiva family, continued till the death of Hemchandra Bhattacharya in 1897-98. Rajaram, Raghunandan Nyayapanchanan and Raghuvira Vidyalankar were other illustrious scholars of this family.[8] The Sobhakar family of Guptipara has the distinction of producing more than a hundred Sanskrit scholars of renown.[9] The family traces its glory from Mahakavi Mathuresh who wrote his *Shyamakalpalatika* in or around A.D. 1672. Mathuresh's son Ramdeva Tarkabagish was a logician of repute. But his son Baneswar Vidyalankar was not only the foremost scholar of the family but also the most learned man of his time. He completed his famous work *Chandravisek* in A.D. 1745 when he was about forty. Baneswar's son Chaturbhuj Nyayaratna, though a logician by training, was also an expert on Hindu law. Ramkrishna Tarkapanchanan of the Vaidik Brahmin family settled in Guptipara in the middle of the 17th century. Ramgopal Vidyabagish of this family was a noted *agambid-tantrik*. The last of the great pundits of this line was Gangadhar Vidyaratna, who was born in A.D. 1830 and was a well-known logician. Among the patrons of these scholastic families of Guptipara were the Rajas of Burdwan, Nadia and Bansberia and the zemindars of Raipur and Patmahal in Hooghly district, of Hatiagarh and Kumarhatta in 24-Parganas and the Sabarna Chaudhuris of Calcutta.[10] Their munificence enabled these scholars to run their schools and to devote their simple lives to the attainment of high erudition.

Ilchoba-Mandalai, a village in the Pandua P.S., became a reputed centre of *nyaya* (logic) and *smriti* (law) studies when Hiranya Bandyopadhyay settled here in the middle of the 16th century. Among the scions of this family were Brajakumar Vidyaratna, the court poet of the Maharaja of Burdwan and Ramgati Nyayaratna (1831-1894) whose book *Bangala Bhasa O Sahitya Vishayak Prastab* is recognized as the first comprehensive history of Bengali literature.[11]

Triberi was a well-known centre of Sanskrit learning even in the last quarter of the 15th century and the tradition continued down to the closing decades of the 19th. The earliest known scholar of the place was Gangadas Bhattacharya Vidyabhusan who was born around A.D. 1480 and acquired mastery in the epics as also the six principal schools of Indian philosophy. His son Sivakrishna Nyayapanchanan and grandson Harihar Tarkalamkar were reputed logicians. Chandrasekhar Bachaspati, another son of Sivakrishna, was a scholar in jurisprudence and he completed his famous work *Tirthasara* in 1729. Harihar's son Rudradeva Tarkabagis wrote a commentary on *Prabodhachandrodaya*, which, according to his name, came to

be known as the *Raudri* commentary. But the greatest scholar of the family, who was to become the most learned pundit of the time and an undisputed authority on Hindu law, was Rudradeva's son Jagannath Tarkapanchanan. He was born in 1694 or 1695 and for 90 years from 1718 to 1807 when he died, his vast erudition in *vyakarana* (grammar), *nyaya* (logic), *alamkara* (poetics), *smriti* (law) and *ayurveda* (medicine) attracted students to his school in Tribeni from far and wide. His best contribution in the field of learning was the masterly compilation of the customary Hindu laws relating to contracts, successions and personal behaviour. A product of great scholarship and unremitting labour, the work, entitled '*Vivadabhangarnava*', was taken up in 1788 at the instance of Sir William Jones, founder of the Asiatic Society, and completed in 1792. It was a vast improvement on an earlier compilation of the same nature called '*Vivadarnavasetu*' brought out by a team of eleven pundits in 1775 at the behest of Warren Hastings. Jagannath's treatise was translated into English by James Colebrook in 1798 as 'A Digest of Hindu Law on Contracts and Successions.'[12] Ghanashyam, a grandson of Jagannath, who had helped the latter in his monumental work, was a renowned scholar in jurisprudence. In 1913 died Ambikacharan Vidyaratna, the last of the great scholars of this line. With him ended the scholastic glory of Tribeni.

The adjacent village of Bangsabati (popularly called Bansberia) became a centre of Sanskrit studies at the close of the 17th century under the patronage of the local Raj family. Raja Rameswar, who came to live here in 1673, settled pundits with land grants and founded some 45 *tols* and *chatuspathis* in the village. Among the noted scholars of the place were Ramsaran Tarkabagish, Rambhadra Siddhanta, Ramchandra Bachaspati and Atmaram Nyayalamkar. With the death of Srinath Tarkalamkar, the last of the great pundits of Bangsabati, in 1919, the tradition came to an end.[13]

Konnagar's celebrity as a seat of Sanskrit learning reached its peak at the time of Anandachandra Bhattacharya Sarbabhauma, who flourished in the latter half of the 17th century. Dinabandhu Nyayaratna (1819-1895), the logician, was the last of the great scholars of Konnagar.[14]

The '*vidya-samaj*' of Uttarpara, which flourished since the end of the 17th century, was an extension of the '*vidya-samaj*' of Bali in Howrah district, the tradition of which goes back to the 15th century. Of the early Sanskrit scholars of Uttarpara the most noted was Dayaram Siddhanta, a pundit of the Bali '*vidya-samaj*', who settled here in 1716 under the patronage of Ramsaran Chaudhuri. His son Krishnakanta Nyayapanchanan and grandsons Ramlochan Tarkabhusan and Ramtanu Nyayabhusan were reputed logicians. Naiyaik-Shiromoni Taracharan Tarkasiddhanta, a cousin of the latter, was the maternal grandfather of Jaykrishna Mukhopadhyay, the illustrious zemindar

of Uttarpara. Taracharan's son, Jaysankar Tarkalamkar, was a famous logician and the editor of a journal on *Navyanyaya*, the study of which flourished under the Gaudiya Vaishnavas of Bengal. On his death in 1850, his mantle fell on his pupil Umakanta Tarkalamkar.[15]

Besides these well-known centres, there were other seats of Sanskrit learning in the district at Bhadreswar, Baidyabati, Sheoraphuli, Sheakhala, Haripal and Bakulia. The members of the family of Mahes Nyayaratna, the renowned logician, taught at Sheakhala and Haripal and those of Kriparam Tarkasiddhanta at Bakulia.[16]

Dirghanka, now a derelict village adjacent to Baidyabati, was a seat of *ayurvedic* studies since the end of the 16th century. Kabichandra, belonging to the Datta family of the place, wrote his famous treatise on medicine, *Chikitsa-ratnavali*, in 1661. His other works were *Kavyachandrika*, a book on poetics and *Swarlahari O Dhatuchandrika*, a book on grammar.[17]

The tradition of the Basu Roy family of Sugandhya (Polba P.S.) in the practice and teaching of *ayurveda* dates back to the 16th century when they were reportedly the physicians of the Mughal nobility in Bengal. Of the medical treatises produced by the members of this family, only one entitled *Sukhabodh* and written in 1702 under the pseudonym *Vaidyaraj* has survived.[18]

Since the end of the 17th century Janai-Baksa in Chanditala P.S. came to be regarded as a seat of *jyotisha* or astrological studies. Among the practising astrologers and teachers of the place Madan Mohan Acharya was the most famous.

Early history of modern education

The Jesuit missionaries of Portuguese origin were the first to introduce western education in the district According to the Portuguese records, two Jesuits, Francisco Fernandes and Dominigo deSouza, who arrived in Hooghly in May 1598, "erected a school and a hospital " It appears that "they sent Bengali children to be educated in the great Jesuit college of Santa Fe in Goa, known as the College of Sao Pauls. Fr. H. Jesson, S. J., mentions the names of five Bengali children who were pupils of the College of Santa Fe in 1558." Various writers have referred to a Jesuit college at Hooghly but by 1765 it was "already in ruins." Its remains were unearthed in 1915. Besides, there was the "Public School and Nunnery of Miscardia" founded in the latter part of the 15th century and a college at Bandel established by French Jesuits in 1723 which was later converted into a Convent school, and still later in 1870, into a Middle English school named St. John's M. E. School. This was done "for the education of the poor boys of the locality." All these schools and colleges were meant for the propagation of sectarian Christian education.[19]

The educational activities of the Jesuits were merely of an exploratory nature and they did not interfere with the *pathshalas*, *tols*, *chatuspathis*, *madrasahs*, *maktabs* which by and large continued to be the principal institutions for imparting education till the first

decade of the 19th century. The earliest reference to modern western education is to be found in Pandit Sibnath Sastri's *Ramtanu Lahiri O Tatkalin Bangasamaj* where he states that the first English school in the district was founded by one Rev. Robert May of the London Missionary Society in the Dutch town of Chinsura in 1814. By 1818, May's efforts resulted in the establishment of 36 schools in Burdwan, Hooghly and Nadia districts attended by over 3,000 pupils. What happened to these schools after May's death in 1818 is not known, for in 1824 we find only 3 of his schools existing in the Hooghly district. The next reference to western education is to be found in a letter from the Accountant General, dated March 25, 1824 authorizing the Collector of the district "to continue to pay to Rev. Mundy the sum of Rs. 800 per mensem on account of the native schools supported by Government in Cinsurah and its vicinity." Of the 14 schools under Rev. Mundy's care, 3 were within the Hooghly district at Mankundu, Hooghly and Bansberia and some of them were new English schools while in the rest, which were traditional schools, the study of English had been introduced. In 1832 financial assistance was withdrawn from these institutions and it was ordered that private parties could take them over subject to inspection by Government agencies. The school at Hooghly was saved from extinction in 1834 by Mr. D. C. Smyth, the then Judge of Hooghly, who secured some land and raised subscriptions from the zemindars of the district with which he founded what was possibly the first High English school in West Bengal, outside Calcutta. This school starting with only 23 students on its rolls was subsequently amalgamated with the *madrasah* attached to the Hooghly Imambara and came to be known as the Hooghly Branch School which exists to this day.[20]

"Towards the end of the year 1844 the Government appears to have awoke to the importance of the education of the people of the interior, and to have sanctioned the establishment of three village schools, 'in which sound and useful elementary instruction may be imparted in the vernacular language.' The sites for these schools were to be chosen by the Collector. This measure was duly notified to the inhabitants of the district, but only 12 villages applied for the preference. The Collector decided in favour of Boinchi and Kannagarh (probably Uttarparah), the people of which were willing to erect and maintain the school houses. The claim of Bydyabati was rejected, as it was too near to Serampore, 'that friendly seat of learning.' The Collector wished one of the schools to be established in the neighbourhood of Jehanabad (Arambagh), but the site had not been fixed upon at the close of the year 1845. Shortly afterwards the late Babu Joykissen Mookerjee and his brother Rajkrishna liberally came forward and endowed the Uttarparah school with two putni mehals —Boinchi and Ramnagar."[21]

By the forties of the 19th century the enlightened sections of the

Calcutta society were convinced about the necessity of western education but were apprehensive that the Christian missionaries, the pioneers in the field, were detracting young Indian students from a respectful attachment to the culture and heritage of their country. Maharshi Devendranath Tagore, a leader of this group, who had founded with the help of his associates the Tatwabodhini Pathsala in Calcutta in 1840, transferred it to Bansberia in April 1843 to cater to the needs of the *mofussil*.[22] On the first year of its existence at the new site, the school had about 200 students on its rolls. Akshoy Kumar Dutta taught in this institution. "But as some of the boys became Vedantists, many parents withdrew their sons from the school."[23] After some time it ceased to function for shortage of funds and the property was purchased by Alexander Duff of the Free Church Mission "to open a seminary there for instruction in English and Bengalee."[24] But the school finally closed down in the last decade of the 19th century.[25]

In 1854, Sir Fredrik Halliday, formerly Educational Adviser to the Governor General, was appointed Lt. Governor of Bengal and he immediately turned his attention to the spread of education in the domain under his care. He appointed Pandit Iswarchandra Vidyasagar, then Principal of the Sanskrit College, Calcutta, to draw up a scheme for revitalizing the moribund Oriental schools and preparing a model syllabus combining what was good in traditional Indian education and modern western education. Vidyasagar toured extensively in the countrysides visiting, among other places, Sheakhala, Radhanagar, Khanakul-Krishnanagar, Sripur-Balagarh, Kamarpukur, Ramjibanpur, Mayapur, Keshabpur, Paihal in the Hooghly district and finalized his plan for 'model education' which included the study of a classical language, vernacular, English, geography, history, select biographies, mathematics, physics, physiology, ethics and civics at different stages. His endeavours resulted in the opening of four 'model schools' within a year at Harope (28th August, 1855), Sheakhala (13th September, 1855), Khanakul-Krishnanagar (28th September, 1855) and Kamarpukur (28th September, 1855).[26]

Among the local pioneers of early English education in the district was Babu Digambar Biswas, who in 1844 founded the Chinsura Preparatory School which could not continue for long as it depended entirely on fee receipts.

The endowment left by Haji Mohammad Mohsin (A.D. 1732-1812) also played an important role in the spread of education in the district. During his life-time he had founded a *madrasah* which, after his death, was amalgamated with the Imambarah School started and maintained from the proceeds of the trust fund created by him. Following mismanagement of the trust properties, Government took over the administration of the fund in 1832 and established the

Hooghly Mohsin College on August 1, 1836. At the instance of Babu Joykissen Mookerjee of Uttarpara, one of its founders, the Imambarah School came under the Hooghly Mohsin College in December, 1837 with the new name Hooghly Branch School and has been functioning since.

Serampore Missionaries

No account of early education in the district is complete without a reference to the contributions of the Christian missionaries of Serampore and especially of William Carey, Joshua Marshman and William Ward.

"During the first half-century of the East India Company's rule in Bengal, it did almost nothing for the education of the people; partly because in the late 18th century education was still not regarded as the responsibility of the Government in Britain, and also because it feared to arouse the hostility of the people by introducing a new pattern of education. The company was also hostile to any form of missionary activity, but this did not deter William Carey, not quite the first but certainly the greatest and most versatile of the early Christian missionaries in northern India, from coming to Bengal in 1793. Carey was educationist, philologist, botanist and social reformer as well as missionary and these diverse talents were made creative by his great qualities of character and personality, especially his compassion, imagination and determination. In 1800, after seven years of frustration in the unsympathetic atmosphere of British India, he found a permanent refuge in the Danish settlement of Serampore, where he was joined by Joshua Marshman, William Ward and their families, who collaborated harmoniously with him for the rest of their lives. Marshman had been a teacher before he left England and he played a particularly important part in the educational work of this unique community.

"In Hooghly district they founded many elementary schools, some girls' schools and the Serampore College for higher education in arts, science and theology. Their motives were threefold: a desire to dispel ignorance and to disseminate a true understanding of the nature of the world, as they saw it; a concern for ethical standards in daily life and work; and to spread Christianity.

"As soon as the missionaries established themselves at Serampore they opened a school, but it was not until after 1813 that they could undertake education work on a large scale in the surrounding region, for only in that year was the East India Company's ban on missionary activity relaxed. In 1816 Joshua Marshman wrote a pamphlet 'Hints Relative to Native Schools', in which he outlines a scheme for developing a network of elementary schools on the pattern of the 'monitorial system' of the English educationist Lancaster modified to suit local conditions. At first the plan won considerable support from the public, and during the next two years the missionaries were able to open over a hundred schools throughout Bengal, in-

cluding several in Hooghly district, at Singur, Konnagar, Rishra, Baidyabati and many other places besides Serampore itself. The 'monitorial system' was devised to give large number of children some elementary education in spite of the chronic shortage of qualified teachers. As it was applied in Bengal, the schools were superintended by the Serampore missionaries, who visited each one periodically. Each school was under the immediate care of a master, but the actual imparting of instructions to the pupils was done by the monitors. Firstly, they were taught to read and write their mother-tongue, after which they entered on a course of instruction in the rudiments of science, geography, history, arithmetic and ethics. The fundamentals of contemporary knowledge were distilled into maxims 'in compressed yet perspicuous form' and illustrated by local references. They were printed in Bengali at the Mission Press at Serampore in separate text books for the different subjects and despatched to the schools. So however incompetent the school masters might be, the text books compiled at Serampore ensured that the pupils received at least the rudiments of sound learning.

"Another virtue of this system was its cheapness; it was calculated that the entire expense of a circle of 50 schools with an average of 70 pupils each would be only Rs. 825 per month. On the other hand, a valid and serious criticism of the system was that the pupils simply had to learn bits of information by heart from text books instead of being taught to understand what they learnt. But the missionaries evidently felt that the most pressing need of the hour was to broadcast at least the rudiments of contemporary knowledge as widely as possible, and in view of the almost total lack of trained teachers, the 'monitorial system' seemed the only suitable method.

"The Serampore missionaries believed that education could only be imparted effectively through the medium of the mother-tongue, as opposed to the traditionalists who called for the continued use of Sanskrit or Persian and an increasingly influential group who preferred English. But whereas these two parties tended, in their different ways, to think mainly of education for a minority intelligentsia, Carey and Marshman wanted to make the 'new learning' available to the whole people. They wished to place modern science at the disposal of the ordinary people for improvement of their living standards. So, it must not come to them as an alien and esoteric subject but as a technique for immediate practical use. They regarded Bengali as a rich and expressive vehicle for this purpose and worked hard to produce not only text books and translations of English books but also the famous dictionaries and grammars of the language. (Bengali prose largely developed through the endeavours of the Serampore missionaries. Munshi Ramram Bose, who helped Carey in his translation of the Bible, was one of the early architects of

Bengali prose which was at the same time being enriched by the writings of Raja Rammohan Roy, a native of this district.—Ed.).

"The new schools immediately became very popular; local people took the initiative in inviting the missionaries to establish them in their villages, and soon began to manage them themselves, as Carey had hoped they would. So during the 1820s the missionaries gave up to some of the schools, while those in their immediate neighbourhood were amalgamated into one 'central school' at Serampore; but they continued to produce text books (in conjunction with the Calcutta School Book Society, which had been founded in 1817 with Carey as a leading figure) and to train some teachers. Perhaps in this connection might be mentioned the two Serampore magazines 'Dig Darshan' and 'Samachar Darpan' (the first newspapers in Bengali.—Ed.) both started in 1818. The former, in particular, was designed to be read in the schools, and in general their purpose was to give the new literates something wholesome to read so that their new skill should not rust away through want of practice, and also to widen and spread the new learning; they contained interesting, useful and ethically uplifting articles on a variety of different subjects.

"The Serampore Trio also pioneered education for girls. The main development in this field came after 1818 in which year Mrs. Hannah Marshman started a girls' school at Serampore, and by 1827 there were no less than 12 such schools in and around the town. As in the case of boys' schools these proved difficult to supervise properly; so, in 1830 they were consolidated into one central school at Serampore. (William Adam in his Report on the Vernacular Education in Bengal and Bihar, submitted to the Government in 1838, reported. "Native female schools were begun by the Serampore missionaries at that settlement in 1823 and there are now two in operation, one called the Central School containing 138 girls and a second called the Christian Village School containing 14."—Ed.). This enterprise also received much public support and proved to be the dawn of a new era for women in which they had an opportunity of developing their personalities and playing a more active and respected part in society. The two schools for boys and girls continued at Serampore under the auspices of the Baptist Missionary Society until 1926 when they were closed as part of a policy of retrenchment. The boys' school was amalgamated with another at Bishnupur (24-Parganas) but the girls' school was revived at Serampore in 1927, partly through the initiative of Mrs. Howells, the wife of the then Principal of Serampore College, and has continued ever since.

"The crowning work of Carey and his colleagues in Hooghly district, however, was the Serampore College. It was founded in 1818, a year after the Hindu (now Presidency) College in Calcutta and is thus the second oldest institution for higher education in modern studies in India. Its syllabus was to comprise 'Eastern literature

and Western science,' thus combining the heritage of both India and Europe. To begin with, the greatest emphasis was placed on Sanskrit, the key to Indian languages and culture, but as time passed, science assumed a more prominent place and the missionaries had to yield to the growing demand for more English. What distinguished this institution from others of its kind was that the medium of instruction was Bengali. There was general agreement among all progressive educationists that elementary education should be given in the mother tongue, but Carey alone regarded Bengali as a suitable medium for higher education also. He tried to develop a process of translations to meet the needs of the new institution and looked forward to the day when all the 'choicest treasures' of Western literature and science would be available in Bengali. The college had a Theological Department for the training of ministers for the Christian churches in India but the Arts-Science Department was open to students of every creed or caste or race. Great care was taken not to offend the religious convictions of non-Christians, and ever larger numbers of the latter came to attend its classes. Whereas in elementary education Carey's immediate aim was the widest possible diffusion of the rudiments of modern knowledge, for the Serampore College he had a different purpose—it must offer a real intellectual challenge to the ablest young men of the land.

"In 1827 King Frederick the VI of Denmark granted the college a Charter, similar to that of the Universities of Copenhagen and Kiel, empowering it to confer degrees, and Carey's vision of a Christian University seemed to be realized. Adequate finance, however, was never forthcoming; the endowment fund vanished in a series of bank crashes a few years later and the Charter had still not been used when Calcutta University was founded in 1857. So Serampore College was affiliated to Calcutta, until in 1883 it suffered an almost total eclipse. The Baptist Missionary Society, which had managed it since shortly after Carey's death, closed most of the departments and it continued merely to give some training to ordinands for the Baptist ministry. From this position it was restored by its 'second founder', Dr. George Howells, in the years after 1910. He re-opened the Arts-Science Department which has grown steadily ever since, taking the degrees first of Calcutta, and since 1960, of Burdwan University. (The college has again been affiliated to the University of Calcutta since 1966.—Ed.). Dr. Howells used the Danish Charter (confirmed by the Bengal Legislature in an Act of 1918) to reform the Theological Department into a separate University, which has conferred degrees in theology on students from Serampore and also from a growing number of affiliated colleges scattered throughout India. As the years went by more and more churches and missionary societies, besides the Baptist Missionary Society, joined in supporting the College, and in 1949 its Council, the

supreme governing body, was transferred from London to Serampore itself."[27]

"The Serampore missionaries were the first to set up a printing press in eastern India. They printed the first books ever published in Bengali language, and laid the foundation of a vernacular library; they were the first to cultivate and improve that language and render it the vehicle of national instruction. They published the first vernacular newspaper in India and laid the way in all departments of intellectual improvement. The inhabitants of the Hooghly district in particular, and of the lower provinces in general, owe these noble, and self-denying pioneers of education a debt of gratitude which can never be repaid."[28]

Female education

The next important step towards the spread of female education in the district was taken by Pandit Iswarchandra Vidyasagar. From 1849-50 he was a close associate of John Drinkwater Bethune in his pioneering activities in this field. When in 1857, Lt. Governor Halliday turned his attention to female education, he got Vidyasagar as his chief adviser. Even before the Educational Council of the Governor General had sanctioned Vidyasagar and Halliday's scheme to open elementary schools for girls in rural areas or had granted any money, Vidyasagar, true to his energetic character, went ahead and between November 1857 and May 1858 opened with the help of local people as many as 35 such schools in Hooghly, Burdwan, Midnapur and Nadia districts (20 of which were in Hooghly) with a total roll strength of 1,300 students. When, eventually, Government declined to maintain these schools, he resigned from the post of Principal of the Sanskrit College, spent about Rs. 3,500 from his own pocket and set up a fund called the *Narisiksha-Pratisthan Bhandar* to sustain the institutions for some time.[29] Vidyasagar established his girls' schools at the following villages in Hooghly district on the dates given within brackets[30]: Polba (24th November, 1857), Daspur (26th November, 1857), Boinchee (1st December, 1857), Digsui (7th December, 1857), Talandu (7th December, 1857), Hatina (15th December, 1857), Hoera (15th December, 1857), Napara (30th January, 1858), Udairajpur (2nd March, 1858), Ramjibanpur (16th March, 1858), Akbarpur (28th March, 1858), Sheakhala (1st April, 1858), Mahesh (1st April, 1858), Birsingha* (1st April, 1858), Goalsara (4th April, 1858), Dandipur (5th April, 1858), Depur (1st May, 1858), Ranjapur (1st May, 1858), Malaypur (12th May, 1858), Bishnudaspur (15th May, 1858), and Badangunj† (10th May, 1858).

In 1861, the Order of the Sisters of St. Joseph of Cluny (Roman Catholic) had founded the St. Joseph's Convent for Girls at Chandernagore. It flourished for forty years and then the anti-clerical French Government banned the institution. It was, however, revived after

* Vidyasagar's own village; now in Midnapur district, then in Hooghly.
† This village was then in Midnapur district but is now in Hooghly.

a few years so that in the centenary year of its establishment in 1961 there were two schools, one preparing pupils for the Indian School Certificate examination through the English medium and the other, a Bengali-medium Junior High School with 700 girls on its rolls.

Press and printing

Jesuit missionaries of Portuguese origin were the first to introduce printing presses in India around the sixth decade of the 16th century and the earliest book was on Christian theology printed in Roman characters in Goa in 1557 Between then and the end of the 17th century several religious books pertaining to the propagation of Christianity seem to have been printed in Portuguese, Malayalam and Tamil at the presses set up in different coastal towns of south India.[31] But the Portuguese Jesuit missionaries who had settled in Hooghly district do not appear to have set up any printing press. The first Portuguese book written in this district in A.D. 1598 was possibly printed in Portugal.[32] The first ever printed Bengali book (in Roman types), *Crepar Xaxtrer Orthbhed* or কৃপার শাস্ত্রের অর্থভেদ (Meaning and Implication of the Faith of Mercy), was written by a Portuguese, Manuel d'Assumption, in 1734 and printed in 1743 in Lisbon.[33]

It is debatable whether the first press in Bengal was the one set up by one Mr. Andrews at Hooghly in 1778. But there seems to be no doubt that it was the first to use Bengali types for printing Nathanial Brassey Halhed's 'A Grammar of the Bengal Language', one of the earliest books to be printed in Bengal. Col. (later Sir) Charles Wilkins of the Bengal Army prepared the type faces for printing Halhed's book which, incidentally, were the first to be made in India, the earlier ones in use being imported from Europe Wilkins trained one Panchanan Karmakar, a native of Tribeni (or Baidyabati) and a blacksmith by caste, in the technique of moulding type faces and in 1793 he produced, all by himself, a set of copper founts for printing a book in Bengali meant for popularizing the Permanent Settlement of Lord Cornwallis.[34]

William Carey came to Serampore equipped with a printing press from which the first printed page came out on March 18. 1800.[35] He soon got in touch with Panchanan Karmakar and his son-in-law Monohar and established for the Serampore Mission Press a foundry where type faces of different Indian, Asian and European languages began to be cast.[36] It was, however, not the first of its kind in Bengal; a similar foundry had been set up in Calcutta in 1798.[37] Between 1801 and 1832 the Serampore Mission Press printed 2,12,000 copies of books in 40 languages. In 1818 Eustace Carey started the Baptist Mission Press in Calcutta and in 1837 the printing establishments at Serampore and Calcutta were combined. William Ward established the first paper mill of the district at Serampore for maintaining a steady supply of paper for the Serampore Mission Press where the first book to be printed between March 18, 1800 and February 10,

1801, was a Bengali translation of the New Testament by Ramram Basu and Thomas, edited by Carey.*

The first original book in Bengali prose to be printed at the Serampore Mission Press was *Raja Pratapaditya Charitra* by Ramram Basu, a native of Chinsura, a pundit at the Fort William College and a collaborator of William Carey in the latter's endeavour to translate the Bible. It carries two title pages, one in English giving the year of publication as 1802, and the other in Bengali mentioning it as 1801. Another book in Bengali prose, *Kathopakathan*, either written or edited by Carey, has the following words printed on the title page: 'Dialogues/intended/to facilitate the acquiring/of/the Bengalee language/Serampore/Printed at the Mission Press/1801.'

The first newspaper in Bengali, the weekly *Samachar Darpan*, was published by the Serampore Mission on May 23, 1818. It was preceded by the first Bengali monthly journal, *Digdarshan*, the first issue of which appeared in April 1818. (For details see Chapter XV).†

LITERACY

Growth of literacy

According to the Census of 1961, 34.65 per cent of the total population of the district were literate (i.e. they could at least read and write a simple letter in their mother tongue), which compared favourably with the West Bengal average of 29.3 per cent, Hooghly's position being excelled only by Calcutta, 24-Parganas and Howrah. 46.11 per cent of the males and 21.81 per cent of the females were literates against the State averages of 40.08% and 16.98% respectively.

The extent of literacy in the urban and rural areas of the district, however, show a wide divergence. In 1961, 51.01 per cent of the urban population (57.95% males and 41.8% females) and 28.92 per cent of the rural population (41.49% males and 15.66% females) were literate. In the State taken as a whole in 1961, 52.89 per cent of the urban and 21.64 per cent of the rural population were literate; for every 59.59 literates in a hundred males in the urban areas, there were 32.86

* The Calcutta Christian Observer, September 1834. pp. 451-54. Sudhir Kumar Mitra, in his *Hugli Jelar Itihas O Bangasamaj*, Vol. I (second revised edn.) Calcutta, 1962, pp. 471-84, reports the finding of a book bearing the title of '*Dharmapustak*' which is different from the above translation of the New Testament being a free translation of both the New and the Old Testaments. Unlike the 125 pages of the former, it contains 800 pages and bears the publication year of 1801 on its first page. As it is not an exact translation of the Bible, Mitra regards it as the first printed prose book in Bengali. Mitra (loc. cit.) also claims that even before the establishment of the Serampore Mission Press there was a press at Serampore which, in 1797, had published a book bilingually titled as '*Sikshaguru*' or 'The/Tutor/or a/New English & Bengalee work/well adapted to teach/the Natives English/in three parts.' Rev. J. Long had included this book in his 'Catalogue of Books Published from Serampore' but Brajendranath Bandyopadhyay (op. cit.) thought that it was published from Calcutta and he was supported by Sajanikanta Das in his *Bangala Gadyasahityer Itihas*. Muhammad Siddiq Khan in his *Bangala Mudran O Prakashaner Godar Katha*, Dacca, 1371 B.S. p. 48 says that the book was published in 1801.

† Catalogue of Carey Exhibition of Early Printing and Fine Printing at the National Library, Calcutta. 1955.

literates per 100 males in rural areas and for every 43.33 literates in a hundied females in urban areas there were only 9.73 literates per 100 females in rural areas.

In 1951 the percentage of literacy in the district was only 25.16. This accounts for a growth of literacy by 9.49 per cent during the decade 1951-61. The corresponding increase in the State taken as a whole during the same period was 7.8 per cent. The growth of literacy in the district in the decade under review was more marked among males than females; in 1951, 35.96% of the males (46.11% in 1961) and 12.76% of the females (21.81% in 1961) of the district were literate. The rate of decennial growth of literacy between 1951 and 1961, was, therefore, 10.15 per cent (or 1.02 per cent per annum) and 9.05 per cent (or 0.90 per cent per annum) respectively for the males and females of Hooghly district.

Urban literacy grew faster than rural literacy over the same decade. In 1951 and 1961 the percentages of urban literacy in the district were 40.47 and 51.01 respectively (representing a decennial growth of 10.54% or 1.05% per annum) and of rural literacy 28.92 and 37.24 respectively (representing a decennial growth of 8.92% or 0.83% per annum). The following table gives percentages of literacy among males and females of the district in urban and rural areas in 1951 and in 1961.

PERCENTAGE OF LITERATE PERSONS MALES AND FEMALES IN HOOGHLY DISTRICT AND ITS URBAN AND RURAL AREAS : 1951 & 1961

Percentage of Total	1951			1961		
	District as a whole	Urban	Rural	District as a whole	Urban	Rural
Persons	25.16	40.47	20.62	34 65	51.01	28.92
Males	35.96	45.87	32.40	46.11	57.95	41.49
Females	12.76	30.85	7.98	21.81	41.82	15 66

Comparable Figures for West Bengal as a whole

Persons	21.5	—	—	29.3	52.89	21.64
Males	—	—	—	40.0	59.59	32.86
Females	—	—	—	16.9	43.33	9.73

The striking growth of literacy amongst all persons as also among males and females of the district during the last 60 years will be evident from the following table:

GENERATION VARIATION IN THE PERCENTAGE OF LITERATE PERSONS, MALES & FEMALES IN HOOGHLY DISTRICT

Year	Percentage of		
	Persons	Males	Females
1961	34.65	46.11	21.81
1931*	13.98	22.78	4.00
1901*	10.68	19.72	1.49

Literacy in different parts of the district

"In the Serampore subdivision," writes B. Ray in the Census 1961, West Bengal District Census Handbook, Hooghly,[88] "42 out of every 100 persons are literate. Next to Serampore is Sadar subdivision. The urban influence has played a good role in showing such a high percentage of literates in these two subdivisions...." Amongst the police stations of the district, Chinsura, containing the headquarters town of Hooghly-Chinsura in it, has shown the highest literacy figure in the district, where 559 persons per mille are literate. Hooghly-Chinsura town being mostly a residential one and being classed as a service town has shown quite a high percentage of literates amongst its inhabitants. 3 out of every 5 persons of this town have claimed to be literate in the 1961 Census. Chandernagore police station, comprising the whole of the Chandernagore subdivisional headquarters town, has also given a fair account of literacy, where 54.78 per cent of its people are literate. Uttarpara and Serampore police stations containing a chain of municipal towns are also the abodes of a fairly high number of literate and educated persons. In Uttarpara the percentage of literates is 54.42. In Serampore it is 50. The towns within the jurisdiction of Uttarpara police station show a percentage of literates as 57.42. In the towns of Serampore police station the figure is 52.32. A chain of organized industries is located within the municipal limits of some of these towns. This chain of towns being very near to the metropolis and being within a very easy reach to the city by electric train and other means of conveyance has been chosen by many people working in Calcutta and its suburbs as their place of residence. These men are mostly workers at the desk in various Government and non-Government organizations. Most of them are literate. On the other hand the industrialized towns of Magra and Bhadreswar police stations are mainly dwelling places of many illiterate millhands. This is precisely the reason for which in the urban areas of Bhadreswar police station the percentage of literates is only 37.05 which is much below the district urban average and in the urban areas of Magra police station,

*Figures for the then French territory of Chandernagore are not available.

this percentage is only 46.63. The statement below gives the percentage of literates by sexes in all the administrative units of the district.*

PERCENTAGE OF LITERATES TO TOTAL PERSONS, MALES AND FEMALES

District/Subdivision/ Police Station	Total Rural Urban	Persons	Males	Females
HOOGHLY	T	34.65	46.11	21.81
	R	28.92	41.49	15.66
	U	51.01	57.95	41.75
Sadar Subdivision	T	33.62	43.34	22.89
	R	28.23	38.16	17.61
	U	54.34	61.82	44.96
Chinsura	T	55.93	63.43	47.00
	R	41.53	50.38	29.89
	U	60.19	67.52	51.71
Polba	T	26.36	36.53	15.71
	R	26.36	36.53	15.71
	U	—	—	—
Dhaniakhali	T	26.78	37.83	15.28
	R	26.78	37.83	15.28
	U	—	—	—
Panduah	T	28.55	37.10	19.41
	R	27.91	36.46	18.36
	U	37.71	45.43	28.06
Balagarh	T	27.60	37.23	17.57
	R	27.60	37.23	17.57
	U	—	—	—
Magra	T	40.58	49.90	28.15
	R	33.16	42.87	21.52
	U	46.63	55.16	34.19
Chandernagore Subdivision	T	35.61	47.67	21.57
	R	30.93	44.78	15.94
	U	45.11	52.97	34.48
Chandernagore	T	54.78	61.76	46.48
	R	—	—	—
	U	54.78	61.76	46.48
Bhadreswar	T	36.19	45.42	22.45
	R	32.53	44.25	18.81
	U	37.05	45.66	23.45
Singur	T	32.64	47.68	16.32
	R	31.77	46.94	15.33
	U	45.90	58.87	31.52

* L.S.S. O'Malley & Monmohan Chakravarti in their Bengal District Gazetteers: Hooghly, Calcutta, 1912, wrote, "The largest number of literates is found in the thanas Hooghly and Serampore, where they represent 20 and 16 per cent respectively of the total population. ... Balagarh thana is the least advanced, only 5 per cent of its population being literate and Goghat thana has the smallest proportion of persons knowing English. The subdivisions show little difference in the percentage of literates, the figures for Serampore being 11 per cent, Arambagh 10.4 per cent, and Hooghly 8.9 per cent." (p. 230).

PERCENTAGE OF LITERATES TO TOTAL PERSONS, MALES AND FEMALES—*contd.*

District/Subdivision/ Police station	Total Rural Urban	Persons	Males	Females
Haripal	T	29.56	41.53	16.66
	R	29.56	41.53	16.66
	U	—	—	—
Tarakeswar	T	32.27	47.02	16.44
	R	31.21	46.25	15.19
	U	41.77	53.62	28.08
Serampore Subdivision	T	41.92	51.67	30.08
	R	31.49	43.89	18.00
	U	54.06	59.82	46.12
Serampore	T	50.08	57.13	40.36
	R	33.12	44.70	20.30
	U	52.32	58.60	43.39
Uttarpara	T	54.42	59.52	47.52
	R	41.91	48.96	30.60
	U	57.42	62.27	51.10
Chanditala	T	31.79	44.71	17.93
	R	31.79	44.71	17.93
	U	—	—	—
Jangipara	T	28.26	40.85	15.41
	R	28.26	40.85	15.41
	U	—	—	—
Arambagh Subdivision	T	26.89	41.44	12.22
	R	26.71	41.33	12.05
	U	32.20	44.41	17.56
Goghat	T	23.94	36.21	11.65
	R	23.94	36.21	11.65
	U	—	—	—
Arambagh	T	29.45	42.54	15.95
	R	29.06	42.25	15.74
	U	32.20	44.41	17.56
Khanakul	T	26.73	43.00	10.68
	R	26.73	43.00	10.68
	U	—	—	—
Pursurah	T	27.64	44.45	10.22
	R	27.64	44.45	10.22
	U	—	—	—

Literacy in different age-groups

"In 1951 amongst the children of the age-group 5 to 14 only 24.08 per cent were literate. In 1961 the corresponding percentage of literates amongst the population in the age-group 5 to 14 is 37.13. In the rural sector 339 out of every 1,000 young persons of the age-group 5 to 14 are literate against the corresponding State figure of 289 only. Amongst the girls for every 1,000 of those within the age-group 5 to 14 only 233 are literates. Amongst the girls of rural areas maximum incidence of literacy is observed in this particular age-group unlike the male population in which case steady rise in relative strength of male literates is observed as they advance in years. The explanation of this apparent anomaly is that the education among

women being a development of comparatively recent times, the number of those who have received instruction is naturally greater among the younger generation. A secondary cause is that the education of a girl is rarely continued after she has left her home for her husband's house and undertaken the duties of a housewife. The same phenomenon is also observed if the entire State is taken into consideration. Amongst the men-folk, majority of the literate males are found in age-group 15 to 34 which is precisely the working age-group. The percentage of male literates amongst the persons in the age-group 15 to 34 in the rural areas is as high as 58.7. In the urban areas their percentage is even higher being of the order of 69 per cent. In the urban areas literacy amongst women-folk is more pronounced in the middle age-group, i.e. 15 to 34 contrary to that observed in the rural areas of the district. In the rural areas persons belonging to the age-group 35 to 59 have given a fairer account in respect of literacy than those aged above 60 years but in the urban areas amongst the males those above 60 years have given a better account in so far as the literacy is concerned than those in the next below age-group 35 to 59. More or less the same trend is observed in the State of West Bengal as a whole in respect of literacy in the various age-groups. The statement below gives the distribution of the number of literate males and females per 1,000 of total male and female population of the district in different age-groups above 5 years of age against the corresponding figures for the State of West Bengal as a whole.

		Rural		Urban	
"State/District	Age-group	Males	Females	Males	Females
West Bengal	All persons above 5 years	389	117	660	500
	5-14	269	144	572	498
	15-34	469	140	702	574
	35-59	397	64	661	418
	60+	390	36	689	308
	Age not stated	197	32	302	145
Hooghly	All persons above 5 years	494	189	647	486
	5-14	393	233	589	517
	15-34	587	222	690	553
	35-59	493	107	632	387
	60+	470	60	651	269
	Age not stated	336	87	1,000	0"

Literacy among Scheduled Castes

About 20 per cent of the district population belong to the Scheduled Castes. Approximately, 50 per cent of the workers amongst them in

the rural areas are agricultural labourers and 50 per cent of their working population in the urban areas are factory hands or labourers. This economic situation largely explains why in 1961 only 11.8 per cent of the Scheduled Caste population in the district were literate—19.5 per cent of males and 3.4 per cent of females being literates. The rural and urban literacy figures among them were about 10 and 20 per cent respectively. The table below gives percentages of literacy among the rural and urban Scheduled Caste population of the district as also among its male and female components.

PERCENTAGE OF LITERACY AMONG SCHEDULED CASTES IN HOOGHLY DISTRICT

	Percentage of		
	Persons	Males	Females
Total	11.80	19.50	3.43
Rural	10.54	18.16	2.46
Urban	20.41	27.93	10.77

In 1961 the rural literacy rates among the different Scheduled Castes of the district were: Jalia Kaibartas 27.8%; Namasudras 27.5%; Rajbansis 15.5%; Doms 10.5%; Bagdis 9.4%; Chamars, Hanris and Kaoras 8% and Bauris 4%. Male literacy was highest among the Jalia Kaibartas (42.3%) and lowest among the Bauris (8%). Female literacy was the highest among Jalia Kaibartas (10%). In the urban areas Namasudras had the highest literacy rate of 31.2% (42.8% males and 20.8% females) followed by the Rajbansis, Jalia Kaibartas and Kaoras.

Literacy among Scheduled Tribes

In 1961 only 4.2% of people belonging to Scheduled Tribes in the district (of whom 4.13% were rural and 5.19% urban) were literate. In the rural areas Oraons had a literacy rate of 7.44% (including 1.2% among the females), Santals had 4.15% and Bhumijs 2.2%. In the urban areas Lodhas with a 15.15% literacy rate were closely followed by the Santals and the Oraons. 62.55% of the working population of the tribals of the district are agricultural labourers and 4% are engaged in manufacturing industry. The following table gives percentages of literacy among rural and urban Scheduled Tribes in the district as also among its male and female components.

PERCENTAGE OF LITERACY AMONG SCHEDULED TRIBES IN HOOGHLY DISTRICT

	Percentage of		
	Persons	Males	Females
Total	4.16	7.35	0.85
Rural	4.13	7.38	0.80
Urban	5.19	6.53	3.14

Levels of education

The preceding discussions about literacy rates are apt to be misleading inasmuch as in the 1951 and 1961 censuses the educational attainments of a literate person were fixed at no higher level than his ability to read and write a simple letter in the mother tongue. For a better understanding of the spread of education among the populace, a closer classification of literates would thus seem to be necessary.

The following table prepared from data provided by the Census of 1961 gives the percentages of educated people of various categories in the rural and urban areas of the district in relation to the respective total male and female populations. The categories are exclusive, i.e. the percentage given for graduates does not include the percentage given for matriculates, although graduates are necessarily matriculates.

PERCENTAGE OF MALES AND FEMALES OF DIFFERENT EDUCATIONAL ATTAINMENTS IN RURAL AND URBAN AREAS OF HOOGHLY: CENSUS 1961

Categories of Educated	Percentage of total population			
	Rural		Urban	
	Male	Female	Male	Female
Literate without educational level	22.95	10.65	28.56	28.05
Up to Primary or Junior Basic level	15.85	4.86	19.05	14.90
Matriculation or School Final or Higher Secondary level (Matriculation or above in case of rural and up to Matriculation or its equivalent in case of urban areas)	2.68	0.13	6.32	1.55
Technical diploma below degree level (urban only)	—	—	0.12	nil
Non-technical diploma below degree level (urban only)	—	—	2.61	0.71
University graduation and/or post-graduate degree, other than technical degree (urban only)	—	—	2.30	0.39
Technical degree or diploma, equal to university graduation degree and/or post-graduate degree (urban only)	—	—	0.27	0.01

The progress of education in the district at various levels between 1951 and 1961, when the Government undertook much more responsibility for its furtherance, will be evident from the following table, for the preparation of which the data furnished by the 1951 and 1961 censuses have been suitably recast.

PERCENTAGE OF MALES AND FEMALES OF DIFFERENT EDUCATIONAL ATTAINMENTS IN HOOGHLY DISTRICT IN 1951 & 1961

Levels of Education	Percentage of Sexwise Population			
	1951		1961	
	Male	Female	Male	Female
Literate without educational level	20.65	8.70	25.75	19.35
Matriculation or School Final or Higher Secondary level	1.75	0.39	4.50	0.84
University graduation and/or post-graduate degree, other than technical degree	0.44	0.03	2.30	0.39
Non-technical degree or diploma	0.12	0.009	2.61	0.71
Technical degree or diploma	0.13	0.0001	0.39	0.01

The table below will give an idea of the sexwise spread of education in the district over the 60-year period from 1901 to 1961. It will be seen that the rate of progress registered during the decade 1951-61 has exceeded those during the preceding decades. (In preparing the table, the relevant census data have been suitably recast).

PERCENTAGE OF MALES AND FEMALES OF VARIOUS EDUCATIONAL ATTAINMENTS IN HOOGHLY DISTRICT FROM 1901 TO 1961

	Literates		Literates without educational level		Literates with minimum to maximum education	
Year	Male	Female	Male	Female	Male	Female
1901	19.72	1.49	16.15	1.43	3.57	0.06
1931	22.78	4.00	16.00	3.69	6.78	0.31
1951	35.96	12.76	20.65	4.06	15.31	4.06
1961	46.11	21.81	20.65	8.70	25.46	13.11

The tables below prepared from the data provided by the Census of 1961 give percentages of persons of different educational levels among the members of the Scheduled Castes and Scheduled Tribes in relation to total male and female populations of the respective groups in the rural and the urban areas of the district.

PERCENTAGE OF EDUCATED MALES & FEMALES OF SCHEDULED CASTES IN RURAL & URBAN AREAS OF HOOGHLY DISTRICT: 1961

	Sexwise Percentage of Scheduled Caste Population			
	Rural		Urban	
Educational level	Male	Female	Male	Female
Literate without educational level	13.42	1.95	18.95	7.60
Up to Primary or Junior Basic level	4.44	0.50	7.58	3.05
Matriculation or School Final or Higher Secondary (in case of Rural—Matriculation and above; in case of Urban—up to Matriculation or equivalent)	0.23	0.003	1.00	0.07
Technical diploma not equal to degree (urban only)	--	—	0.17	nil
Non-technical diploma not equal to degree (urban only)	—	—	0.15	0.004
University degree and/or post-graduate degree, other than technical degree (urban only)	—	—	0.06	0.02
Technical degree equal to university degree (urban only)	—	—	0.003	nil

PERCENTAGE OF EDUCATED MALES & FEMALES OF SCHEDULED TRIBES IN RURAL & URBAN AREAS OF HOOGHLY DISTRICT: 1961

Educational level	Sexwise Percentage of Scheduled Tribes population			
	Rural		Urban	
	Male	Female	Male	Female
Literate without educational level	5.37	0.68	4.06	1.83
Up to Primary or Junior Basic level	1.95	0.11	1.61	1.08
Matriculation or School Final or Higher Secondary (in case of Rural—Matriculation and above; in case of Urban—up to Matriculation or equivalent)	0.04	nil	2.80	nil
Technical diploma not equal to degree (urban only)	—	—	nil	nil
Non-technical diploma not equal to degree (urban only)	—	—	0.21	nil
University graduation degree and/or post-graduate degree, other than technical degree (urban only)	—	—	0.35	0.21
Technical degree or diploma equal to university graduation degree (urban only)	—	—	nil	nil

Some early schools of the district

The fact that the European missionaries settled in this part of the country at various places now in the Hooghly district explains why western education reached it much earlier than other districts of West Bengal. The earliest missionary school appears to be the one established in 1598 at Hooghly by Francisco Fernandez and Dominigo de Souza of the Society of Jesuits of Portugal followed another established by the French Jesuits probably in Bandel. After a lapse of more than two centuries, an Elementary English School was inaugurated at Chinsura in 1814 by Rev. R. May of the London Missionary Society. Next came the Serampore Mission Girls' school established by Hannah Marshman in 1818. Probably in the same year two Elementary English Schools came into existence at Bansberia and Mankundu through the efforts of Rev.May. Rev.Mundy, another pioneer in the field, founded an Elementary English School at Chinsura in or about 1824. All these institutions are no more. But a very old one which subsists to this day is the Zemindary or Subscription School (later re-named Hooghly Branch School) which was founded in 1834 by D. C. Smyth with the help of certain local landlords. Maintained for some time from the Mohsin Fund, the institution was eventually taken over by Government In 1835 a free school was set up at Chandernagore, further details of which are not available. Kallykincur Paulit (that was how he spelt his name),

established entirely through his own efforts the Umerpore School in 1839 which lasted only up to 1844. The Sitapur Madrasah, which became a High School in 1839. has been described earlier. At the instance of Debendranath Tagore, the Tatwabodhini Sabha opened the Tatwabodhini Pathsala at Bansberia in 1843 which had to be wound up in 1846 due to adverse propaganda by orthodox Hindus against its Brahmo sponsors. In 1844 Digambar Biswas and Haricharan Roy founded respectively the Chunchura Preparatory School and the Chunchura Seminary at Chinsura which are no more. The Uttarpara Collegiate High School established by Joykissen Mookerjee in 1846 is still in existence. The Janai Training School, another very old school of the district, was started in 1850 by Ramnarayan Mukhopadhyay and Thakurdas Chakravarti. Jagneswar Singh founded in 1853 the Bhastara M. E. School which subsequently became a H. E. school. In 1855 Iswarchandra Vidyasagar inaugurated the Model Schools at Harul, Sheakhala, Krishnanagar and Kamarpukur the subsequent development of which is not definitely known. The Konnagar High School founded by Sibchandra Deb in 1855 and the Dasghara High School established by Mangobinda Biswas in 1858 are still in existence.

Growth of Primary and Secondary education

In 1895-96, 54.7% of boys of school-going age were in school. The corresponding figures were 54.7% in 1901-02. As regards girls of school-going age, only 3.3% of them were in school in 1895-96, the corresponding figure for 1908-09 being 6.2%.[39] In more recent times, for instance in 1946-47, 44% of boys and 10% of girls of school-going age attended schools. The corresponding figures in 1950-51 were 61% and 19% and in 1960-61 58.8% and 33.1%. The growth of primary and secondary education in the district will also be evident from the following table giving absolute numbers of boys and girls attending schools of various levels during three selected years within the period from 1946-47 to 1960-61.

NUMBER OF STUDENTS IN PRIMARY AND SECONDARY SCHOOLS OF HOOGHLY DISTRICT IN 1946-47, 1951-52 AND 1960-61

Years	In Primary Schools (& Junior Basic Schools after 1960)	In Middle Schools (Junior High & Semi or Basic after 1960)	High Schools (& Higher Secondary Schools after 1960)
1946-47			
Pupils	57,313	3,497	22,842
Males	1,42,742	3,274	21,405
Females	14,571	223	1,437
1951-52			
Pupils	1,00,958	10,102	30,520
Males	70,829	7,169	27,821
Females	30,129	2,933	2,699
1960-61			
Pupils	1,94,905	16,236	61,210
Males	1,21,461	10,976	46,800
Females	73,444	5,260	14,410

Growth of Collegiate education

In 1897 the total strength of students in the government-managed Hooghly Mohsin College and the government-aided Uttarpara College was only 231. (Figures for the Serampore College are not available). In 1931-32 these three colleges had 539 students, the total roll strength rising to 696 in 1936-37. In 1946-47 there were four colleges in the district with a total of 869 students (Hooghly Mohsin College—337; Serampore Christian College—343; Uttarpara College—156 and Hooghly Islamic Intermediate College—33). In 1955-56 there were three more colleges in the district, viz. Arambagh Netaji Mahavidyalaya, Itachuna Vijayanarayan Mahavidyalaya and Hooghly Women's College and the total roll strength in all of them was 1,586.[40] By 1960-61 six more colleges came up in the district, viz. Chandernagore College; Aghore Kamini Prakashchandra Mahavidyalaya, Bengai; Bidhanchandra College, Rishra; Hiralal Pal College, Nabagram; Ramakrishna Mission Sarada Vidya Mahapith, Kamarpukur and Shreegopal Banerji College, Bagati raising the total strength of students to 6,799 on 31.3.1961.[41] 5,306 of them were males and 1,493 females. 3,973 were in Arts, 2,724 in Science and 102 in Commerce courses. Total direct governmental expenditure on collegiate education in 1960-61 was Rs. 9,43,625. In 1963-64, there was a total of 8,991 students in the 12 colleges of the district; 6,995 of them being males and 1,996 females. 4,962 of the students were in Arts, 3,069 in Science and 960 were in Commerce courses. Total direct governmental expenditure on collegiate education in the same year was Rs. 11,94,076.

Primary Education

Following the trail of the early schools, discussed before, as many as 1,022 Primary schools were set up in the district by 1896-97. Of these, 921 were Lower Primary and 101 were Upper Primary schools and the total governmental expenditure on them in 1896-97 was Rs. 14,526. In 1908-09 there were 930 Lower Primary and 126 Upper Primary schools teaching 6,110 and 28,123 students respectively with an average of 49 boys per Upper Primary and 30 per Lower Primary school. In 1946-47 there were 805 Primary schools in the district. The reduction in number is more apparent than real as in the meantime many of the Primary schools had been incorporated into Middle English and High English schools. Of these, 4 were managed by Government, 68 by the District School Board, 35 by municipalities, 669 were Government-aided private and 29 were unaided private schools. They taught 57,243 pupils of whom 42,742 were boys and 14,501 girls. In 1951-52, there were 952 Primary schools in the district—29 under Government management, 723 under the District Board, 34 under municipalities while 115 were government-aided private and 51 unaided private institutions with a total roll strength of 1,00,958 pupils of whom 70,829 were boys and 30,129 girls. In 1960-61 the number of Primary schools in the district rose to 1,624 attended by 1,83,886 pupils besides the 84 newly formed

Junior Basic schools with a roll strength of 11,019 students. Of the Primary schools, 56 with 11,132 students were under the Government, 1,413 with 1,52,994 students were under the District School Board and municipalities and 155 with 19,760 pupils were under private management receiving aid from Government or the District or Municipal Boards. There was no unaided Primary school in the period under review. Of the 84 Junior Basic schools, 77 were run by the municipalities or the District School Board while 7 were government-aided private institutions. In the same year there were 41 single-teacher schools in the district with 1,916 students on their rolls.

A scheme purporting to introduce compulsory free Primary Education was started on January 1, 1951 in 569 villages of the district covering 18,909 boys and 9,917 girls of school-going age. By 1959-60, 221 Primary schools were brought under this scheme and 85.9 per cent of children of school-going age in the area under the scheme were attending such schools.

In 1964-65 there were 2,011 Primary and Junior Basic schools in the district of which 66 (including one exclusively for girls) were directly under the Government, 46 (including 3 exclusively for girls) were managed by the municipalities and 1,695 (about one-third of which were co-educational) were run by the District School Board. There were besides 204 privately managed Primary schools aided by Government, 54 of which were specifically meant for girls.[42]

Junior Basic Schools

According to the integrated plan for extension of Basic Education adopted by the State Government, Pre-Primary or Nursery schools are to form the first rung in the ladder of institutional education. The 1961 Census report states that there were only 3 such schools in the district having 126 students and 8 teachers of whom 6 were women. A pioneering experiment in Basic Education was carried out in this district when in the Makalpur and Dadpur Unions ('Anchals' of the present day) of Polba P. S. a pilot scheme was launched in 1949. Under the scheme, 6 Junior Basic (Primary) schools were started at the villages Alipore, Hasnan, Makalpur, Puinan, Samsara and Hanral which proved a success.

In 1959-60 out of the 78 Junior Basic schools in the district, 74 were government-sponsored with their management resting with the District School Board, 3 were privately-managed aided institutions and one, meant exclusively for girls, was a government-aided private school. 62 of these institutions were 5-class and the rest 4-class schools and they had in all 9,421 students of whom 3,380 were girls. In 1960-61 there were 84 Junior Basic schools in the district with 11,019 pupils and in 1963-64, there were 119 such institutions with 19,344 pupils, of whom 11,800 were boys and 7,544 girls. Total direct governmental expenditure for the Basic schools in 1963-64 was Rs. 5,31,797.

SECONDARY EDUCATION

Middle Schools

"In 1908-09 the Middle English Schools numbered 55 and the Middle Vernacular Schools 12 (as against 28 in 1893-94). The decline in Middle Vernacular schools is not peculiar to this district, and is largely due to the general desire of parents to have their children taught English."[43]

In 1946-47 there were 75 Middle English schools in the district, one of which was directly under the District Board, 58 were privately managed and aided by Government while 16 were privately managed but did not receive any aid. 3,497 students, of whom 3,274 were boys and 223 girls, attended these institutions.

As a result of re-organization of Secondary Education after Independence, the former Middle English schools were changed into 4-class Junior High schools and by 1959-60 there were 135 such institutions in the district of which 102 were meant for boys and 33 for girls. Total expenditure on these schools for the same year was Rs. 8,97,281, government's share in it being Rs. 3,43,945. By March 1965 the number of such schools had risen to 146 of which 113 were privately managed and aided by the Government, 31 were privately managed but did not receive any aid and 2 were directly under Municipal Boards. A total of Rs. 11,38,673 was spent on these schools in 1964-65 of which Government's share was Rs. 3,79,535.[44]

Senior Basic Schools

Senior Basic Schools are designed to provide practical-cum-theoretical education to children between 11 and 14 years of age coming up from the Junior Basic stage. They consist of 3 classes, viz. classes VI, VII and VIII and are set up only at the instance of the Technical Section of the State Education Department on the basis of local requirements.

In 1960-61 there were 10 Senior Basic Schools in the district with a total roll strength of 716 students. In 1964-65 the number of such institutions increased to 22 and all of them were government-aided private institutions, 4 being meant exclusively for girls. Out of a total of Rs. 2,69,520 spent on them in 1963-64, Government shared Rs. 1,77,815.

High and Higher Secondary Schools

The school founded at Chinsura in 1834 by D. C. Smyth, the then Judge of Hooghly, was the first High English School in the district and possibly the earliest in West Bengal outside Calcutta. Even before 1834 it had run for 20 years as an Elementary school having been originally established as such in 1814 by Rev. R. May. In December 1837 it was re-named Hooghly Branch School which exists to this day.

"In 1908-09 there were 32 High English Schools, i.e., schools teaching up to the Entrance or Matriculation standards of the University; and the total number of pupils studying in them was 5,370 representing an average of 168 for each school. In no other district in the Burdwan Division are there so many schools of this class or so many pupils at this stage of education. Three are Govern-

ment schools, viz., the Hooghly Collegiate School, the Hooghly Branch School with Model School, and the Uttarpara School. The Hooghly Branch School is the oldest of the all existing High schools... ."[45]

In 1946-47 there were 67 High English schools in the district of which 3 were managed by Government, 28 were government-aided private and 36 unaided private institutions. They taught 22,842 pupils, 21,405 of them being boys and 1,437 girls.

Since 1950 the West Bengal Board of Secondary Education has replaced the University of Calcutta as the authority controlling secondary education in the State. The inspection of High schools rests with officers of the Directorate of Public Instructions, West Bengal. The Board, however, consults the Education Directorate in all matters of policy. In 1951-52, there were 103 High English schools in the district; 3 of them were managed by Government, 63 were government-aided private and 37 were unaided private institutions. Their total roll strength was 30,520, consisting of 27,821 boys and 2,699 girls. In 1961 the number of High schools fell to 98 as by then many of these old-type schools had been converted into the new 11-class Higher Secondary schools. Higher Secondary education, introduced in West Bengal in 1956-57, envisaged replacement of 10-class High schools by 11-class Higher Secondary schools teaching different streams of learning like Humanities, Science, Commerce, Agriculture, Fine Arts, Home Science etc. As a result of this process of re-organization, 66 Higher Secondary and 98 High schools were functioning in the district in 1960-61 with 32,298 and 28,912 students on their rolls respectively. Of the 66 H.S. schools, 3 were run by Government, 4 were under the District School Board and the remaining 59 were government-aided private institutions. The 98 High schools were all under private management, 89 receiving aid from Government while the rest were unaided.

In 1964-65 there were 211 High and Higher Secondary schools in the district, about two-thirds of which belonged to the latter category. In 1963-64 the total expenditure incurred by the High schools was Rs. 20,55,587 of which Government shared Rs. 7.81,210 and by the Higher Secondary schools Rs. 72,60,845 of which Government contributed Rs. 40,46,192. In 1965-66, 92 High and 143 Higher Secondary schools were functioning in the district. 32 of the High schools were meant for girls, 12 were for boys and 48 were co-educational. Similarly, 29 of the Higher Secondary schools were for girls, 59 were for boys and 55 were co-educational institutions.

Colleges for General Education

Of the 12 colleges in the district imparting general education, the Serampore Christian College, founded in 1818 (a year after the establishment of the Hindu College in Calcutta), is the oldest. Its first governing body consisted of William Carey, Joshua Marshman,

Serampore College

William Ward and the Danish Governor of Serampore. Its syllabus was designed to educate the students in "Eastern literature and Western science." To start with, the media of instruction were the vernacular languages though Western science and English were studied as special subjects. English was introduced as the medium of instruction sometime after 1824. From the very beginning the college had a Theological Department for training ministers for the Christian churches in India. In 1827 King Frederick VI of Denmark granted the College a Charter similar to those of the Universities of Copenhagen and Kiel empowering it to confer degrees and function as an independent University.

In 1857 the University of Calcutta came into existence and this College was one of the first to be affiliated with it. In 1883 it was decided to close the Arts-Science Department of the college which continued thereafter only as a theological institution. In 1910 the college was thoroughly re-organized by its 'second founder', Dr. George Howells. The theological section was upgraded to confer degrees of B. D. (Bachelor of Divinity) while the Arts-Science Department was revived and rationalized. The University of Calcutta again extended its affiliation to the college in 1911 for teaching students up to the Intermediate in Arts examination followed by similar permission for the Intermediate in Science and B. A. (Pass and Honours) examinations. In 1935-36 affiliation was given for B.Sc. (Pass and Honours) courses. In 1960 along with all Hooghly colleges it came under the University of Burdwan but since 1966 it (as also other colleges in the Serampore subdivision) reverted to the University of Calcutta. The Theology Department constitutes an independent federative type University conducting the 3-year Bachelor of Divinity, 2-year Master of Theology and the Doctor of Divinity courses and conferring the respective degrees

Facing the Bhagirathi, the main college building is an imposing Ionian structure adapted to suit the tropical climate. There are separate buildings within the campus for housing the various departments. The college has a well stocked library containing one of the richest collections of early printed books in India. Two hostels, one for boys and the other for girls, cater to the needs of residential students. On 31.3.66 it had 1,156 students reading for the pre-University (Arts & Science), B.A. and B.Sc. courses while the Theology Department had 37. In 1965, 81.3%, 69%, 75% and 60.4% of its students passed the B.A., B.Sc., pre-University Arts and pre-University Science Examinations respectively.

Hooghly Mohsin College

The Hooghly Mohsin College, Chinsura, was opened on August 1, 1836 and shifted to its present building sometime between March and May of the following year. Owing to the mismanagement of the Trust Fund left by Haji Muhammad Mohsin, Government took over its control in August 1818 and subsequently decided to utilize

a part of the proceeds in establishing the college which has been a Government institution since 1872. It started with two departments, English and Arabic, the former admitting students who had passed the Entrance Examination and the latter only Muslims for advanced studies in Arabic, Persian, Islamic theology and law. Under the first regulation of the Calcutta University, the college was affiliated up to the M.A. and Law examinations until 1916 when, under the second regulation, all post-graduate classes were discontinued. Affiliated to the University of Calcutta since 1857, the college came under the Burdwan University in 1960 with affiliation in a number of arts and science subjects up to the degree standard including certain Honours courses.

Raja Peary Mohan College, Uttarpara

In 1846, Jaykrishna Mukherjee (Joykissen Mookerji), the well-known zemindar of Uttarpara, subsidized the opening of a Government school at his native town. His proposal to establish an aided college at Uttarpara was accepted by Government in 1889 on condition that the school was taken off its care. The College and the Collegiate School were then placed under a governing body consisting of the District Magistrate as its President and certain representatives of the Mukherjee family as members. In 1897 Government resumed charge of the Collegiate School but the College continued to be maintained as a private institution under the Calcutta University mainly through the munificence of the Mukherjee family. Up to 1953, when the institution was renamed Raja Peary Mohan College, it was affiliated only up to the intermediate standard but thereafter the affiliation was extended to cover degree courses in Arts, Science and Commerce. With the formation of the Burdwan University in 1960 it came under it but reverted to the Calcutta University in 1966 along with other colleges in the Serampore subdivision. The college receives an annual maintenance grant from the Government of West Bengal. In 1964 it had 1,500 students on its rolls.

Chandernagore College

In 1862 Father M. Barthet of the Mission of Freres de Saint Esprit established a school at the French territory of Chandernagore styled Ecole de Sainte Marie. In 1887 it came under the Chandernagore administration and was named Ecole des Garcons. Around 1891 it was upgraded to teach up to the First Arts (Intermediate) standard and became affiliated to the Calcutta University. In 1901 it was renamed the Dupleix College and later to College de Bussy. Around 1908, owing to the involvement of certain students and teachers in the terrorist movement, the French authorities decided to close down the College section but the school continued to function. In 1931 the college wing was revived to teach up to the Intermediate standard in English and French and was affiliated to the Calcutta University. It was upgraded to a degree college in Arts subjects in 1947 and to Science subjects in the following year. Since the merger of Chandernagore with India in 1952, it is being run as

a Government college with certain special privileges safeguarded for it. It remained under the Calcutta University until 1960 when, with the formation of the Burdwan University, it was affiliated with the latter. Honours classes in the 3-year degree course were introduced from 1961 and the college now conducts degree courses (including Honours courses) in Arts, Science and Commerce, runs a morning degree college for girls only in Arts subjects and teaches French language and literature up to the Honours standard.

Hooghly Women's College

The Hooghly Women's College at Chinsura was founded on August 1, 1949 as a Government sponsored institution mainly on the munificence of Sri Nripendra Nath Dhar of Hooghly who raised and donated about a lakh of rupees for the purpose. It was affiliated to the University of Calcutta up to May 1960 when it came under the University of Burdwan. The courses taught are for the University Entrance (equivalent to Pre-University of the University of Calcutta) and Degree examinations, both in Arts and Science. Housed in a new building with spacious grounds, the college takes special interest in physical and co-curricular activities of the girls. There is an attached hostel for residential students. With a provision to admit up to 500 pupils, the college had 424 of them on its rolls in 1964-65.

Netaji Mahavidyalaya, Arambagh

Founded in 1948, the Netaji Mahavidyalaya, Arambagh is affiliated to the Burdwan University for the University Entrance (Arts and Science), B.A. and B.Sc. (Pass and Honours) and B.Com. courses. It does not have its own building or hostel yet. On 31st March 1966 it had 974 students on its rolls.

Bijaynarayan Mahavidyalaya, Itachuna

Bijaynarayan Mahavidyalaya, Itachuna (Pandua P.S.) was formerly affiliated to the Calcutta University but has come under the Burdwan University since 1960. Founded mainly through the munificence of the local Kundu family, it runs classes for the University Entrance (Arts and Science) and B.A. and B.Sc. courses. The college is housed in its own buildings on spacious grounds and had 606 students on March 31, 1961.

Bidhan Chandra College, Rishra

Bidhan Chandra College, Rishra was opened in 1957. It has been affiliated to the Calcutta University except for the period from 1960 to 1965 when it was under the Burdwan University. It conducts Pre-University courses in Arts, Science and Commerce and Degree courses in Arts and Commerce. On March 31, 1961 it had 188 students on its rolls.

Hiralal Paul College, Nabagram

Hiralal Paul College, Nabagram (Uttarpara P.S.) came into existence in 1957. It is now affiliated to the University of Calcutta for Pre-University and Degree courses in Arts and Commerce. Housed in its own buildings, it had 490 students on its rolls in 1961.

Aghorekamini-Prakash Chandra Mahavidyalaya, Bengai

Established in 1958, the Aghorekamini-Prakash Chandra Mahavidyalaya at Bengai (Arambagh P.S.) derives its name from those of the parents of late B. C. Roy. Situated deep in the rural interior

of this district, the college is affiliated to the University of Burdwan for University Entrance and Degree courses in Arts and Science. It had 188 students on March 31, 1961.

Sreegopal Banerjee College, Baghati

To bring the facilities of higher education to the doorsteps of the inhabitants of his native village, late Shib Chandra Banerjee, a well-known businessman, donated land and money to the West Bengal Government for the establishment of a first grade co-educational college after the name of his father, Sreegopal Banerjee. The Sreegopal Banerjee College at Baghati in Magra police station was accordingly started in 1959 as a Government sponsored institution. It runs classes for the University Entrance (Arts and Science) and Degree (Arts and Science) courses with Honours in certain subjects. Housed in its own buildings and having two hostels, one for boys and the other for girls, the college had, in January 1965, a roll strength of 799 against an intake capacity of 800 students.

Sree Ramakrishna Sarada Vidyamahapith, Kamarpukur

Sree Ramakrishna Sarada Vidyamahapith was opened in the village of Kamarpukur in Goghat P.S. in 1959 after the names of Ramakrishna Paramhamsadeva, who was born in this village, and his wife Sarada Debi. It is affiliated to the Burdwan University for the University Entrance course in Arts and Science and the Degree course in Arts only. It has its own building and a hostel for the residential students.

TEACHERS' TRAINING

Teachers' Training Schools

As early as in 1896-97 there was a First Grade Government Training School at Hooghly-Chinsura (with a roll strength of 110 pupils) to train 'masters' for teaching vernacular in Secondary schools and teachers in Primary schools. There were also 6 Guru Training schools at that time at various places in the district which were under private management but received grants-in-aid from Government. They trained vernacular teachers in Primary schools and *gurus* in government-aided *pathsalas*. In 1931-32 the First Grade Government Training School at Hooghly had only 91 students but their number further declined to 31 in 1936-37. In the latter year the Calcutta Training School was amalgamated with the Training School at Hooghly but the number of students went down to 26 in 1946-47. After Independence, the Hooghly Training School was the only one of its kind in West Bengal but its record prompted the thought that it had perhaps outlived its purpose. The acceptance of free and compulsory primary education as a directive principle in the Constitution of India, however, kept the institution functioning and with continued increase in the roll strength of its students in recent years, it now looks forward to a more purposeful existence. In 1950-51 the Hooghly First Grade Training School (also called the Normal Training School) and the 4 Junior Training schools (which had replaced the former Guru Training schools) had a total strength of 178 students. The corresponding number in 1960-61 was 185.

Teachers' Training College

The Hooghly Teachers' Training College, managed by the Government of Bengal, was opened in 1906 but had to be closed down after about 15 years for lack of popular enthusiasm. It was re-opened as a Government institution in 1955 and now conducts B.T. classes for male graduates only. A similar college, the Institute of Education, located at Chandernagore prepares female graduates for the B.T. examination.

TECHNICAL VOCATIONAL EDUCATION

College of Textile Technology, Serampore

The College of Textile Technology, Serampore is the most important technical institute in the district and the only of its kind in West Bengal. It was established at Serampore in 1908 "because there was at that place and in its neighbourhood an intelligent artisan population which had already adopted certain important weaving improvements."[46] Its initial object was to provide instructions in the latest methods of hand-weaving to young men and women of fair educational background (the minimum being Matriculation or its equivalent) who would qualify as teachers, overseers, managers in hand-weaving establishments as also to the actual handloom weavers and their sons for whom no academic qualification was necessary. The institute was also meant to serve as a centre for disseminating improved techniques to weavers through various weaving schools, peripatetic or otherwise.[47] In 1916 the original syllabus was changed to make it more useful as a technological institute for textile industries in general.

Between 1922-23 and 1926-27, 83 students of the higher course passed the Final Diploma examination and 116 of the lower course passed the City & Guilds examination of the London Institute. In 1931-32, there were 138 trainees (including 26 women) in the institute which then ran three courses, viz. a 3-year course for men to qualify for the higher diploma, a 2-year course for artisans and a 2-year course for women in fancy needle-work, spinning and weaving, carpet making, dyeing and calico-printing. In 1953-54 the institute was upgraded to a technical college and had on its rolls, on March 31, 1955, 205 students including 44 women. Since 1961 it is affiliated to the Burdwan University for the B.Sc. (Tech) course.

Hooghly Institute of Technology

The Hooghly Institute of Technology offers 3-year licentiate courses in civil, electrical and mechanical engineering, on successful completion of which the students are given diplomas of L.C.E., L.E.E. and L.M.E., respectively. It also runs 2-year draughtsmanship courses in these subjects. The one-year certificate course provides training in various crafts and trades numbering nearly thirty. In 1959-60, 623 students passed out from the school.

West Bengal Survey Institute, Bandel

The West Bengal Survey Institute, Bandel was opened in 1949 to provide training to 100 students at a time in methods of survey and measurement. In 1959-60 it incurred an expenditure of Rs. 49,929 of which Government shared Rs. 8,947.

Serampore Technical School

The Serampore Motor and Electrical Engineering School is the only institution of its kind in the district. Privately managed, it had 94 pupils in 1959-60 when it incurred an expenditure of Rs. 10,187.

Agricultural School, Chinsura

Established in 1921 the State Agricultural School, Chinsura trains farmers (and others) in improved methods of agriculture. Between 1924 and 1940 it was under private management. It conducts diploma and certificate courses in agriculture, horticulture, poultry science, zoology and agricultural engineering and has an attached farm comprising 70.3 acres of land. Government expenditure in running the school was Rs. 31,495 in 1959-60. Advanced training centre for educating the passed-out students in rural leadership was started in 1954 with aid from the Ford Foundation. Both the school and the training centre are now designed to prepare students for the post of Gramsevaks and Gramsevikas.

Agricultural Research Centre, Chinsura

Established in 1932 the Agricultural Research Centre, Chinsura used to be run by the Indian Council of Agricultural Research till 1944 when it came under the State Department of Agriculture. It carries out researches in economic botany, pestology, plant pathology and agricultural chemistry relating to rice and other important agricultural and horticultural produce.

EDUCATION IN FINE ARTS

Chandernagore School for Art and Chandernagore and Serampore Mohila Shilpasram, meant for male and female students respectively, are two of the more important institutions in the district which impart training in painting, sculpture and artistic crafts. Both are privately managed and receive grants-in-aid from Government and local self-governing bodies. In 1959-60, 11 boys and 135 girls received instruction from these institutions.

A music school under the name of Sastriya Sangit Vidyalaya was inaugurated at Chinsura in May 1966. There are several other privately managed schools of music and dancing in the more important towns which do not follow any prescribed standard or syllabus of training.

The statement below prepared by the Directorate of Education, West Bengal, gives material information about various types of educational institutions in the district.

EDUCATION IN HOOGHLY DISTRICT: 1960-61 & 1963-64

	1960-61	1963-64 (Provisional)
PRIMARY EDUCATION		
(a) *Primary Schools*		
(1) Number of Primary Schools	1,624	1,882
(2) Total enrolment	1,83,886	2,40,101
(*i*) Number of boys	1,14,643	1,44,519
(*ii*) Number of girls	69,243	95,582

EDUCATION IN HOOGHLY DISTRICT: 1960-61 & 1963-64.—*contd.*

	1960-61	1963-64 (Provisional)
PRIMARY EDUCATION		
(3) Total Government Direct Expenditure (in Rs.)	38,38,858	64,82,154
(*b*) *Junior Basic Schools*		
(1) Number of Junior Basic Schools	84	119
(2) Total enrolment	11,019	19,344
(*i*) Number of boys	6,818	11,800
(*ii*) Number of girls	4,201	7,544
(3) Total Government Direct Expenditure (in Rs.)	3,06,136	5,31,797
SENIOR BASIC SCHOOLS		
(1) Number of Senior Basic Schools	10	22
(2) Total enrolment	716	1,732
(*i*) Number of boys	448	1,162
(*ii*) Number of girls	268	570
(3) Total Government Direct Expenditure (in Rs.)	69,774	1,84,815
JUNIOR HIGH SCHOOLS		
(1) Number of Junior High Schools	151	152
(2) Total enrolment	15,520	18,695
(*i*) Number of boys	10,260	10,795
(*ii*) Number of girls	5,260	7,900
(3) Total Government Direct Expenditure (in Rs.)	3,50,161	3,79,535
HIGH SCHOOLS		
(1) Number of Class X High Schools	98	89
(*i*) Number of boys' institutions	79	63
(*ii*) Number of girls' institutions	19	26
(2) Total enrolment	28,912	25,584
(*i*) Number of boys	21,722	15,774
(*ii*) Number of girls	7,190	9,810
(3) Total Direct Government Expenditure (in Rs.)	8,11,332	7,81,210
HIGHER SECONDARY SCHOOLS		
(1) Number of Higher Secondary Schools	66	122
(*i*) Number of boys' institutions	53	96
(*ii*) Number of girls' institutions	13	26

EDUCATION IN HOOGHLY DISTRICT: 1960-61 & 1963-64.—*contd.*

	1960-61	1963-64 (Provisional)
HIGHER SECONDARY SCHOOLS		
(2) Total enrolment	32,298	59,923
(*i*) Number of boys	25,078	44,886
(*ii*) Number of girls	7,220	15,037
(3) Total Government Direct Expenditure (in Rs.)	15,74,262	40,46,192
TECHNICAL INSTITUTIONS		
(1) Number of Technical Schools (Includes Engineering, Technical & Industrial Schools etc.)	6	7
(2) Total number of students	927	1,536
(3) Total Government Direct Expenditure (in Rs.)	1,92,967	5,02,433
COLLEGES		
(1) Number of Colleges	12	12
(*i*) for men & co-educational	11	11
(*ii*) for women	1	1
(2) Total enrolment	3,973	4,962
(*i*) in Arts		
(*a*) men	2,657	3,211
(*b*) women	1,316	1,751
(*ii*) in Science	2,724	3,069
(*a*) men	2,548	2,825
(*b*) women	176	244
(*iii*) in Commerce	102	960
(*a*) men	101	959
(*b*) women	1	1
(*iv*) in Theology	28	37
(3) Total Government Direct Expenditure (in Rs.)	9,43,625	11,94,076
TEACHERS' TRAINING INSTITUTIONS		
(1) Number of B. T. Colleges	1	1
(2) Total enrolment	115	112
(*i*) men	95	94
(*ii*) women	20	18
(3) Total Government Direct Expenditure (in Rs.)	95,817	1,45,675

EDUCATION IN HOOGHLY DISTRICT: 1960-61 & 1963-64.—*concld.*

	1960-61	1963-64 (Provisional)
JUNIOR BASIC TRAINING COLLEGE		
Number of institutions	1	2
Enrolment	100	235
Total Government Direct Expenditure (in Rs.)	19,675	54,971
OTHER SCHOOLS		
(1) Total Number of such schools (Nursery, Commerce, Agriculture, non-Basic Training, Music & Dancing, Other Fine Arts, Oriental Studies and Adults)	436	405
(2) Total Number of students	17,962	14,299
(3) Total Government Direct Expenditure (in Rs.)	2,37,496	3,49,437

ORIENTAL EDUCATION

Tols

Reporting in 1891, on the traditional educational institutions in the district, Pandit Mahesh Chandra Nyayaratna, the then principal of the Sanskrit College, Calcutta remarked: "At Tribeni in Hooghly district, a long famous seat of Sanskrit learning, such learning is now in decadence. ... Its one *tol* now represents the 'seven or eight' that existed in 1818, as stated by Mr. Ward (Adam's Report on Vernacular Education in Bengal and Bihar, edited by Rev. J. Long, Calcutta 1868, p. 40). This solitary *tol* is taught by a learned Pandit Ambika Charan Vidyaratna. ...Khanakul-Kristanagar, long noted as one of the most eminent seats of learning in Bengal, has but four *tols* at present, none of them in a flourishing condition. Nor do its present Pandits enjoy the reputation that their predecessors did. Pashpur and Narit, which too had for numerous generations been places of Sanskrit learning, have now ceased to have a single *tol*. Bansberia with twelve or fourteen *tols*, Bhadreswar with its ten and Gondolpara with its ten in 1818 (according to Mr. Ward's enumeration as quoted at pages 40-41 of Adam's Report), have almost ceased to have any *tol*, there being only one good *tol* now at Bansberia taught by Pandit Mahendra Nath Tarka-Panchanan and another (a nominal one) at Bhadreswar."[48]

In 1912, L.S.S. O'Malley and Monmohan Chakravarti wrote: "Higher Sanskrit education is given in a number of recognised *tols* which send up candidates for the Sanskrit First, Second and Title Examinations. ...One *tol*, the Viswanath Chatuspathi at Chinsura, is maintained from a fund left by its founder, the late Babu Bhudev Mukherji. The other *tols* in this district are private and are mostly found in old places such as Tribeni (including Bansberia), Bhadreswar, Baidyabati, Uttarpara, Tarakeswar, Khanakul-Kristanagar etc."[49]

There were altogether 86 *tols* and *chatuspathis* in the district on

March 31, 1965. Of these the Viswanath Chatuspathi at Chinsura was the largest. Affiliated to the Vangiya Government Sanskrit Siksha Parishat it receives grants-in-aid from the Government. The proceeds from the Rakhal Chandra Pal Chatuspathi Trust Fund, created in 1922, maintain a number of *tols* and *chatuspathis* in the district. Benode Chatuspathi at Boinchi depends on the Benode Behari Trust Fund created in 1949. The Veda Prachar Samiti, a private organization, runs the Adarsha *Tol* at Uttarpara. The curriculum followed by these institutions varies. Some impart Sanskrit education in various subjects up to the Title standard, some to the First Sanskrit Examination standard and others to the Second Sanskrit Examination standard. 59 of the 86 *tols* and *chatuspathis* in the district were receiving grants either from the Government through the Vangiya Government Sanskrit Siksha Parishat or from the Zilla Parishad or from both.

Madrasahs

By the end of the 18th century, most of the old *madrasahs* or centres of Islamic learning in the district were in a moribund state. The more important of them like those at Pandua, Sitapur, Furfura, Dasghara and Kaswara were precariously continuing their existence. In 1772 the Sitapur *madrasah* got a new lease of life through a grant made by Mr. Cartier, the then Governor of Bengal. In 1839 Government tried to bring it under the control of the General Committee of Public Instruction which was resented by the *mutwali*. In 1872 it accepted the general course of modernized Islamic education prescribed by Mr. Blochman, the then Assistant Professor of the Calcutta *Madrasah*. Some time in the second decade of the present century it was converted into a High English School with a separate Arabic and Persian department. The history of the Furfura and Dasghara *madrasahs* is almost the same; they also became High English Schools voluntarily with separate Arabic and Persian departments.

Founded in 1817 out of the Trust Fund left by Haji Muhammad Mohsin, the *madrasah* at Hooghly became, in course of time, the most important centre of Islamic learning in the district. From August, 1818 it came under Government management. In 1897 it had 166 students and Government expenditure on it was Rs. 2,375. Writing in 1951, about the state of education in West Bengal for the period 1942-47, Snehamoi Datta and Subodh Chandra Sengupta wrote, "*Madrasah* education was imparted through different channels. There was the reformed scheme in which the Junior *Madrasah* stage from Class V to Class VI was controlled by the Department of Education and the High *Madrasah* stage from Class VII to Class X was controlled by the Board of Intermediate and Secondary Education, Dacca. At the end of this a student might join an Intermediate College under the Calcutta University, but he would more naturally go to an Islamic Intermediate College of which West Bengal had only one—the Government Intermediate College at Chinsurah, Hooghly,

which had a lean existence with only 33 pupils as against 36 in 1942. The total expenditure here was Rs. 19,405 of which Rs. 18,372 came from provincial revenues."[50] The Islamic Intermediate College ceased functioning after the partition of the country but the Hooghly *Madrasah* still exists.

SOCIAL EDUCATION

Until recently, social education in its various spheres largely depended on private efforts which resulted in the formation of many voluntary organizations in the district, the more important of which have been dealt with in Chapter XV. Some of them attracted official appreciation,[51] while others were helped with grants-in-aid or other patronage. The Prabuddha Bharat Sangha, Itachuna (Pandua P.S.), established in 1940, is one of such eminent organizations of the district which received favourable notice from the Government. Its work, particularly in the field of education, has been exemplary. After Independence, Government undertook in a larger measure the responsibility for the spread of education through the Education Extension Programme under the Community Development Project and the Social Education Programme sponsored by the Education Department, aiding at the same time such deserving private organizations as were rendering meritorious service in these fields. The Social Education Programme aims at imparting such fundamental education to the rural people, through Government or Government-aided private agencies, as would make them capable of playing leadership roles within their immediate communities as also in the larger society. The programme is directed not only towards academic or vocational training, but aims at remodelling the social attitudes of the villagers. The Programme is implemented through literacy centres, social education centres, school-cum-community centres, night schools, folk entertainment units and libraries. (The school-cum-community centres and night schools are mostly one-teacher primary schools). In 1959-60 there were 41 single-teacher primary schools in the district with a total roll strength of 1,916 students; in March 1965 the number of such schools rose to 63 which were all under the direct supervision of the District Social Education Officer. There were in all 300 adult education and literacy centres for males and 50 for females in the district in March 1966. In each block, there is a Social Education Extension Officer to implement the Social Education Programme.

PHYSICAL TRAINING

Government efforts: early days

A District Organizer of Physical Education, attached to the establishment of the District Inspector of Schools, was appointed for the first time in Hooghly in 1938. At his instance a District Youth Welfare Council was formed in 1939 to promote and co-ordinate the activities of various sports and youth organizations in the district and to assist them in all possible ways. The underlying idea was per-

haps to win over young men and women from activities considered undesirable by the alien Government.

Government efforts : after Independence

After Independence, a District Officer for Physical Education & Youth Welfare, who was not subordinate to the District Inspector of Schools, was posted in Hooghly in 1957 for the development of physical education, recreational facilities and youth welfare as envisaged in the Second Five-Year Plan. In 1959, the District Youth Welfare Council was reconstituted to include the District Social Education Officer and the District Development Officer and its functions now include the holding of a national physical efficiency test; a youth festival, where competitive football, volleyball, *kabadi*, athletics, folk-dances, folk-songs, *jatra*, one-act plays, recitations etc. are organized and sponsoring of club leaders' and teachers' training camps etc. in each or alternate years.

Private efforts: Hooghly District Sports Association

The Hooghly District Sports Association, Chinsura was established in 1928 and is affiliated to the Indian Football Association, Bengal Hockey Association etc. The Subdivisional Sports Associations in the district are affiliated to it with the exception of the one at Chandernagore. It organizes competitive tournaments in all major games and has as its members 50 sporting clubs in various parts of the district.

Hooghly District Referees' Association

Hooghly District Referees' Association, Chinsura is an aided private organization conducting qualifying examinations for referees. It maintains a panel of qualified umpires to supervise games organized by the District Sports Association.

Scouts & Guides

The organization named Bharat Scouts and Guides, West Bengal has no district branch in Hooghly but for the four local Associations at Hooghly-Chinsura, Chandernagore, Serampore and Uttarpara are affiliated to the State body through which they receive financial aid from Government. All of them are recognized by the District Youth Welfare Council.

Bratachari Samity

The District Bratachari Samity was established at Chandernagore in 1932 for promoting the *bratachari* movement and physical culture through traditional folk dances of Bengal. The central organization in Calcutta sends trained teachers from time to time to its branches in the district which are recognized by and receive aid from the District Youth Welfare Council.

Physical Culture Clubs' Federation

The Hooghly District Physical Culture Clubs' Federation was established at Chinsura in 1952. It is affiliated to the West Bengal National Weight Lifting and Body Building Association and has almost all the gymnastic clubs in the district as its members. It organizes annual body building competitions and confers the honorific title of 'Hooghly Shree' on the best entrants. Arranging training camps for gymnasts in the district also falls within its functions. The organization receives occasional grants from the District Youth Welfare Council.

District Inter-School Sports Association

Originally known as the District Indian Schools Sports Association, the District Inter-School Sports Association, a Government sponsored organization receiving grants ranging between Rs. 500 and Rs. 600 per year, was established at Chinsura in 1939. It is affiliated to the West Bengal Schools Sports Association and organizes inter-school tournaments in major games, athletics, gymnastics and swimming etc. on a zonal basis, the number of zones being 10 now spread all over the district. Besides, it selects and sends representative district school teams to compete in the games and sports organized by the West Bengal Schools Sports Association in Calcutta.

Non-recurring physical education grants, ranging from Rs. 100 to Rs. 200 per school, are sanctioned every year by the State Government, to boys' and girls' schools by rotation to help them improve their playing grounds, purchase apparatus etc.

The formation of Auxiliary Cadet Corps (ACC) in schools started in the year 1957 and by 1960-61 there were 55 platoons, each under a teacher, a trained platoon commander. The platoon commanders are given honoraria and the cadets receive cost and maintenance grants for their uniforms. Government expenditure on the project was Rs. 20,515 in 1960-61.

LIBRARIES

After Calcutta, the Hooghly district has been the cradle of the library movement in West Bengal as some of the earliest libraries in the State were started here. Haji Muhammad Mohsin had built up a rich collection of Arabic, Persian and other books and manuscripts which are now in the National Library, Calcutta. Jayakrishna Mukherjee of Uttarpara and Bhudev Chandra Mukherjee of Chinsura were other pioneers. Kumar Munindra Chandra Dev Roy-Mahasaya of Bansberia was a prominent figure in the library movement of West Bengal.

Libraries established in the 19th century

The table below gives the particulars of some of the important libraries established in the district in the 19th century which are still in existence.

Name of Library	Year of establishment	Sponsors
Hooghly Public Library	1853	Sponsors unknown
Konnagar Public Library	1858	Sponsors unknown
Uttarpara Jayakrishna Public Library	1859	Jayakrishna Mukherjee
Janai Public Library	1860	Sponsors unknown
Serampore Public Library	1871	Hitakarini Sabha
Chandannagar Pustakagar	1873	Jadunath Palit, Haramohan Sur, Mahendranath Nandi, Pramathanath Biswas, Ambikacharan Pal, Motilal Seth and Krishna Chandra Das
Bansberia Sadharan Pathagar	1891	Dev-Roy family of Bansberia

After Independence, the libraries of the district have been classified, as below, according to their importance and the kind of help received from the Government—the more important of them coming within the purview of the Social Education Programme. (1) Public Libraries (Government managed, Government sponsored private, Government aided private and unaided); (2) Library Centres (Government sponsored and Government aided); (3) Rural Libraries (Government sponsored private; Government aided and unaided private); (4) District Library (Government sponsored and privately managed) and (5) Area Libraries (Government sponsored and privately managed).

Hooghly District Central Public Library, Chinsura

Established at Chinsura in 1853, the Hooghly District Central Public Library now functions as the District Library under the new classification. It is sponsored by Government and its management rests with a governing body consisting of official and non-official representatives. It has a motor van for circulating books to its affiliated units for which it received from the Government a grant-in-aid of Rs. 30,790 in 1963-64.

Konnagar Public Library

Founded in 1858, Konnagar Public Library is now a Government sponsored Town Library with its management resting with a managing committee. It has some 11,000 books in its collection.

Jayakrishna Public Library, Uttarpara

Uttarpara Public Library (now known as Uttarpara Jayakrishna Public Library) was founded by Jayakrishna Mukherjee (1808-1888) on April 15, 1859. He donated to it his private collection of books and was largely responsible for erection of the imposing building in which it is housed facing the Bhagirathi. Besides many rare books and copies of administrative reports and of defunct foreign and Indian journals of the 17th, 18th and early 19th centuries, it possesses 124 palm-leaf and handmade paper manuscripts donated by Pandit Jayasankar Ghosal, the well-known logician and maternal uncle of Jayakrishna Mukherjee. There is a 192-page catalogue of the books possessed by the library in 1903. In April 1958 it became a Government sponsored library under a managing committee presided over by the Subdivisional Officer of Serampore. Since July 1964 it has been a public library under direct Government management. Its collection consists of over 20,000 books, a quarter of which are rare publications, many issues of 50 journals and magazines and about 250 rare manuscripts some of which are as old as the 17th century. The library suffers from shortage of space and fumigation and other modern preservation techniques are yet to be introduced in it.

Serampore Public Library, Serampore

The Hitakarini Sabha of Serampore (which succeeded the Serampore Welfare Committee founded in 1806) established the Serampore Public Library in 1871. The books donated to it by the Hitakarini Sabha, augmented by similar public gifts, formed the first collection of the library which has passed through vissicitudes tided over by the patronage of several prominent residents of Serampore including the

late Tulsi Charan Goswami. In July 1966, its collection consisted of about 10,000 books. It has no building of its own and the rented premises in which it is located does not permit of further expansion. It is affiliated to the Bengal Library Association and is a private organization receiving grant-in-aid from the State Government as also from the local municipality.

Chandannagar Pustakagar, Chandernagore

Chandannagar Pustakagar was founded in 1873 by some local young men. By the end of the first year it had only 1,382 books. In 1920 the library shifted to its own two-storeyed building named Nrityagopal Smritimandir where it remains to this day. In 1920 its collection consisted of 7,900 books and it had an annual income of Rs. 1,700. In 1935 the stock of books increased to about 20,000 volumes necessitating the construction of another two storeyed building in 1953. By March 31, 1964 the number of books had further increased to 32,131. The Nrityagopal Smritimandir has an auditorium where meetings and lectures are organized from time to time. The library receives grant-in-aid from the State Government and the Chandernagore Municipal Corporation; the total amount was Rs. 1,748 in 1963-64.

Baidyabati Young Men's Association Library, Sheorafuli

The Baidyabati Young Men's Association Library at Sheorafuli was started in 1908 with only 120 books and 40 members. In 1965 it had more than 21,000 volumes and subscribed to 64 periodicals. The library is privately managed but receives aid from the State Government. In July 1966, the membership of the lending section totalled 537 and in the four free reading rooms the average attendance of readers in 1965-66 was 220 per day. The library has a children's section provided with juvenile literature and a special reading room. It is affiliated to the Bengal Library Association.

In 1959-60, there were 267 Public Libraries in the district. Some of them received annual grants-in-aid from the Government while for others such assistance was only occasional. The local self-governing bodies also paid annual grants-in-aid or *ad hoc* amounts to others. The rest were unaided private institutions. In the same year, 90 Public Libraries received aid from the Government, 69 from the Hooghly District Board (now Zilla Parishad), 33 from municipal authorities and the rest (75) were private and unaided. In the same year, again, the aided libraries had a total of nearly 3,00,000 books and they received an overall aid of Rs. 11,509 from the Government while the unaided libraries had a total of 36,205 books with them.

On July 1, 1966 there were 700 Public Libraries in the district—the highest figure for any district in West Bengal.[54] On the same date there was one Government-managed Public Library, viz. Uttarpara Jayakrishna Library, one Government-sponsored District Central Library, viz. the one at Hooghly, 2 Government-sponsored Area Libraries—one at Itachuna and the other at Kamarpukur, 2 Government-sponsored Town Libraries—one at Konnagar and another at

Rishra, and 42 Government-sponsored Rural Libraries, among others, in the district. Besides, there are some Government-aided Library Centres which play a useful part as auxiliaries to the library movement.

Printing presses and periodicals

In 1950-51 there were 54 registered printing presses and 9 registered periodicals in the district. Their numbers increased to 63 and 13 respectively in 1960-61. (For a detailed list of periodicals published from the district, see Chapter XV).

Public halls and auditoria

The following table gives particulars of the more important public halls and auditoria in the district.

Name of hall	Year of establishment	Location	Managed by	Hiring formalities	Accommodation (seats)
Nrityagopal Smriti Mandir	1920	Barabazar, Chandernagore town	Trustees	Can be rented	550
Raja Rammohan Roy Hall	1948	Arambagh town	Local committee	Free, but available at discretion of committee	300
Sarat Chandra Smriti Mandir	1959	Debanandapur, Chinsura P.S.	Sarat Chandra Smriti Samity	Free	300
Rabindra Bhavan	1962	Serampore town	Government-sponsored Rabindra Parishad	Can be rented	700
Rabindra Bhavan	Under construction	Chinsura town	Government-sponsored Rabindra Parishad	—	—

In 1950-51 there were 22 cinema halls in the district attracting, on an average, 2,93,027 visitors per month. In 1960-61 their number had increased to 35 of which 26 were permanent and 9 temporary.

CULTURAL SOCIETIES

Institut de Chandernagor

Among the cultural organizations of the district, the most important is the 'Institut de Chandernagor' which is intended to be a society of international nature in fulfilment of the provision of Article IX of the Treaty of Cession of Chandernagore.

Under the present *ad interim* arrangements, it is being run by the Department of Education, West Bengal in association with the Home Department. The details of participation by the Government of India, an international obligation reinforced by an accepted recommendation of the Jha Commission, are being worked out by the Union Ministry of Education. Collaboration of the Government of France is also being finalized and assistance in kind has started coming in. The Institute is thus State-managed and recognized by the Governments of India and France.

Article IX of the Treaty of Cession of Chandernagore, which took

effect from June 9, 1952, stipulated that 'the Government of India shall assist in the continuance of the French cultural heritage in the said territory in accordance with the wishes of the people of the Free Town of Chandernagore and shall permit the continuance or establishment of cultural services by the Government of the French Republic.' The Commission headed by Dr. Amar Nath Jha, which was appointed in this behalf by the Government of India recommended, *inter alia*, that 'there should be established a Cultural Centre with a Museum, a Library, an Art Gallery, and a Reading Room, and efforts should be made to invite eminent scholars to deliver lectures on French literature and culture from time to time. The Central Government, accordingly, decided that the cultural scheme should be 'entirely' its own responsibility, the State Government being in immediate charge of it. The residence of the erstwhile French Administrator was set apart as a Union property for locating the cultural centre but the supposed lack of French interest and paucity of French souvenirs led to an alternate proposal being mooted in March 1955 for having a municipal museum. For ten long years this project made no headway and the books belonging to the 'Bibliotheque Communale' and the French Administrator's official library as also the exhibits on local history donated by Shri Harihar Sett, a prominent citizen of Chandernagore, continued to be stored in a portion of the Residency without modern arrangements for their proper utilization. In February 1965 Monsieur Pompidou, the French Prime Minister, visited India and discussed the matter with his Indian counterpart, late Lal Bahadur Sastri, and it was mutually agreed between them that the scope for Indo-French collaboration and cultural exchange should be enlarged. Thereafter it was decided to set up the cultural centre not merely for the parochial benefit of Chandernagore but for that of the Eastern India as a whole. Subject to the approval of the Union Government, the Government of West Bengal, therefore, set up the 'Institut de Chandernagor' in January 1966 under the direct supervision of its Education Department associating the Home Department also with it. The Administrator of Chandernagore under the present regime (usually an Additional District Magistrate of Hooghly who holds the office in an *ex officio* capacity) and the Head of the French Departments of Chandernagore College and of the Calcutta University became its first Director and Deputy Director respectively.

The library and reading room were opened in January 1966 and a separate corner for children has also been started Funds have been provided for purchase of books and journals in the French language on different subjects. A 2-year Certificate course in French has been drawn up for adult student on the lines of that conducted by the Alliance Francaise with emphasis on the direct method and the first session started in June 1966 with 75 pupils. The museum and art

gallery, open to the public since 1956, now occupy more space and are looked after by a qualified part-time Assistant Curator. The museum contains exhibits connected with the local history of Chandernagore and a number of French souvenirs including a marble bust of Dupleix and the stately bedstead used by him. Specimens of various crafts and archaeological finds discovered in the district since the Gupta period also form a part of the collection. The art gallery contains paintings of some of the noted artists of Chandernagore. The newly opened ceramics section displays some potteries from Vallauries. In the auditorium named 'Salle de Rammohun' (after Raja Rammohan Roy who was the first Indian member to be elected to the French Academy in 1824) lectures by eminent Indian and foreign scholars are arranged from time to time. The central hall of the Residency, with its lovely chandeliers and giant mirrors, has been set apart for the display of exhibits bearing upon France's contribution to the world through the ages. It will be named after some eminent Frenchmen revered in India.

There are about 5,000 books in the library, mostly in French, many of which are rare. The oldest books date from early 19th century while some are reprints of 17th century texts. Of special interest are the complete sets of proceedings of the Conseil General (of Pondicherry), Consiel Local (of Chandernagore), some documents of the French Parliament and official journals of the French Republic etc. The library is indeed a rich store-house of information relating to the administration of the erstwhile French pockets in India.

The statement below gives the names, locations, years of establishment and major fields of activity of some of the more important cultural organizations of the district.

Name and address of organization	Year of establishment	Activities
Hooghly District Ramakrishna Seva Sangha; 'Vivekananda Bhawan', Hooghly	1952	Cultural talks, nursery, government-aided school & library. Own buildings. Assets about Rs. 1,00,000.
Hooghly Sanskrita Parisad; Hooghly	1953	Cultural talks, promotion of Sanskrit studies, small Sanskrit library and folk recreational activities. Occasional government grants.
Debalaya Sanskriti Sangha; Hooghly	—	Financial help rendered to old temples of the district; renovated the *ratha* of Chandernagore recently.
Prabartak Sangha; Chandernagore	—	Social service, adult education etc.
Mahadesh Parisad; Nabagram	—	Rabindra Bhavan, library, drama section. Own land and building. Government grants for building a stage etc.

Name and address of organization	Year of establishment	Activities
Mahesh Ramakrishna Asram; Rishra	1952	Multipurpose school, Nursery school, Basic school, Area library, cultural talks, hostel and publications. Government aid for different sections.
Vivek Dal; Bhadrakali	1954	Prafulla Sishu Niketan, sports recreational activities and library. Own land.
Prabuddha Bharat Sangha; Itachuna	1940	College, library, dispensary, Nursery, Basic, Multipurpose schools and hostels. Cultural talks. Government grant for all sections.
Ramkrishna Math & Mission; Kamarpukur	1947	Higher Secondary school, hostel, Area Library, Cultural talks, temple, guest house.
Bichitra Durgagati Memorial Hall; Sibtala, Hooghly	—	Cultural talks, drama, music.
Banaful Sahitya Samiti; Serampore	1932	Tagore music school, cultural talks, magazine.
Rabindra Parisad; Hooghly	1965	Rabindra Bhavan under construction.
Serampore Rabindra Bhavan	1962	Cultural functions.
Arambagh Rabindra Bhavan	—	-do-
Chandernagore Rabindra Bhavan	—	-do-
Bharat Sangha; Kamarkundu	—	Library, music, drama etc. Own building.
Suhrid Sangha; Santipalli, Chandernagore	1950	Library, sports, drama and cultural functions. Own building.
Uttarpara Sangit Chakra; Uttarpara	—	Cultural functions, music school. Building fund Rs. 80 000.
Baidyabati Young Men's Association; Sheoraphuli	1908	Cultural functions, library. Own building.
Uttarpara Saraswat Sammelan, Uttarpara	1909	Library, adult education, literary discussions etc. Own building.
Bharati Sahitya Bithi; Gondalpara, Chandernagore	1956	Literary discussions and meetings.
Sandhya Asar; Pandua	1958	Dramatic and variety recreational performances etc.
Bharati Sangha; Kamarkundu	1941	Primary school, music school and library. Government aided.
Gobra Sanskriti Parisad; Chanditala	1954	Debates, discussions, library and night school.
Veda Prochar Samiti; Uttarpara	—	*Tol*, library, discussions, meetings on Hindu theology.
Rajeswari Institution; Dwarhatta	—	Small collection of antiquities.
Saradacharan Museum; Sheoraphuli	—	Small museum of antiquities. Own building.

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APPENDIX

KAVIWALLAS AND COMPOSERS OF HOOGHLY DISTRICT

BY
ASUTOSH BHATTACHARYYA

The mediaeval Bengali Vaisnava lyric poetry lost its vitality and favour with the common people by the end of the 17th century. It became secular in spirit and content and the rigidity of its form relaxed in utter disregard of the existing poetics due to the development of a new pattern of urban life hitherto unknown in Bengal. Hooghly, Chandernagore and Serampore had already developed into important trade centres and an urbanized social life existed over this area even before Calcutta came into being. An atmosphere congenial to the development of an urban type of literature helped the growth and development of a new type of music in this region known as the songs of the *Kaviwallas* from the beginning of the 18th century. The vacuum in the literary field of Bengal created by the death of Bharatchandra in 1760 continued almost till the second quarter of the 19th century when gifted writers of the new age like Isvarchandra Vidyasagar (1820-1891) and Akshay Kumar Dutta (1820-1886) appeared on the literary horizon of Bengal. During this interregnum the *Kaviwallas* carried on the literary traditions of the land and being the only representatives of the age exercised considerable influence on the general populace.

Though it is not known whether the earliest writer of *Kavi* poetry appeared in the Hooghly district, it is certain that some of the early *Kaviwallas* were born within the area now covered by the district. Gonjla Guin, who must have been born before 1760, is regarded as the earliest writer of *Kavi* poetry. Very little is known about him. But from the accounts of his disciples Raghunath Das and Lalu Nandalal, both of whom belonged to the Hooghly district, it seems probable that he could not have belonged to a far off place. More definite information is, however, available about his two disciples.

Raghunath Das was born at Chinsura where he lived during the first quarter of the 18th century. He had three distinguished disciples —Rasu (1734-1807), Nrisimha (1738-1809) and Haru Thakur (1738-1824), all of whom made their mark in the field of *Kavi* poetry as composers and musicians. Raghunath was born in a weaver's family and had two sons Madhabram and Nilambar. Descendants of the family are still living at Chandernagore.

Lalu Nandalal is also believed to have been born at Chinsura though definite information on this point is lacking. But like Raghunath he was also a direct disciple of Gonjla Guin and it is, therefore, reasonable to presume that he also appeared at the same place. It is

sometimes doubted that Lalu and Nandalal were two different persons. Besides one or two of his songs collected by Isvar Gupta, nothing is known about Lalu Nandalal.

Rasu and Nrisimha, two brothers, were important figures in the field of *Kavi* songs during the latter part of the 18th century. One of them composed the songs and the other set tunes to them. They were born in a Kayastha family of Gondalpara near Chandernagore in 1735 and 1738 respectively. Indranarayan Chaudhuri, the *Dewan* of the French Government of Chandernagore was their great patron and it is generally believed that they came in contact with Bharatchandra Roy, the celebrated poet of the time, which seems likely as Indranarayan was also the patron of Bharatchandra. The two brothers took their training as members of the party of Raghunath Das and then formed their own. Both lived long and developed their art under continued patronage of Indranarayan. They excelled in *Sakhi-samvad* and *Viraha* themes and from the small number of their songs collected so far it is not known whether they had also composed songs on other subjects.

Nityananda Das Bairagi (1751-1822), son of Kunja Bairagi, was born in Chandernagore in a traditional Vaisnava family. He was popularly known as Nite or Nitai Bairagi and became famous more for his musical rather than his composing talents. He became very popular among all sections of people as he used to sing both *Kavi* songs, dear to the elite, and *Kheur*, a class of song of inferior taste liked by common listeners. He had a number of talented composers in his party most of whom belonged to the Hooghly district. Nitai popularized their songs throughout West Bengal by his sweet and melodious presentation. It was largely due to him that *Kavi* songs reached artistic levels and came to be recognized as a form of musical expression.

The most widely known *Kaviwulla* Bholanath Nayak, popularly known as Bhola Mayra, though a resident of Baghbazar in Calcutta, is believed to have been born in 1775 at Guptipara. a village in the Balagarh police station of Hooghly district. Like most of the *Kaviwallas* he had very little education but he used to listen to the recital of the Ramayana and the Mahabharata during his stay in Calcutta with his father. As a matter of fact the songs of the *Kaviwallas* were the popular reaction against the orthodox Hindu and Vaisnava literature in Bengal during the 18th and the 19th centuries. Bhola's songs were no exceptions to this but he possessed other merits also. Besides composing songs on traditional themes in the customary manner, he was an expert in composing songs extempore on topical matters. Possessed of a strong personality, his versified attacks on opponents through extempore compositions used to be sharp and bitter. With a strong common sense, presence of mind and a devastating wit he used to make his songs entertaining to a degree. He was an upright

man not afraid to speak the plain truth which endeared him to all except, perhaps, his opponents.

During the latter half of the 19th century Sarvananda Parial, a minor *Kaviwalla*, lived at Rajhati-Senhat in the Hooghly district. He was a Brahmin by caste, an instance not very common among the *Kaviwallas*. He had in his party a composer who was a woman named Mohini Dasi belonging to Midnapur district. About the same time *Kaviwalla* Ishan Samanta and composer Sashimukhi lived at Kaknam in the Arambagh subdivision. Sashimukhi used to take active part in *Kavi's laḍāi* (competition of extempore versification) against Mohini Dasi.

Ramnidhi Gupta, popularly known as Nidhu Gupta or Nidhu Babu, was the greatest figure in the 19th century musical world of Bengal. He introduced the *Tappa* style of singing and was both a talented composer and an able musician. He was born in 1741 at Champta, a village near Triveni. His father's name was Harinarayan who normally lived in Calcutta but during the depredations of the Marathas moved for safety to Champta when Ramnidhi was born. Harinarayan returned in 1747 to Calcutta where Ramnidhi had his early education. But he entered service comparatively early in his life first in Calcutta and then at Chhapra in Bihar. While at the latter place he imbibed the Hindusthani style of music as also folk-music of that area. On his return to Calcutta he devoted himself wholeheartedly to the development of the new style of music known as *Tappa* which is believed to be based on a form of folk-music of Upper India. Ramnidhi founded his own school of music in Calcutta in 1804 and for nearly a century Nidhu Babu's *Tappas* continued to be very popular among the sophisticated music lovers of Bengal. His songs, collected and published in a book named *Gita-ratna*, are characterized by 'intense realism of passion' without being 'offensive or immoral'. They deal more with mundane love than love sublime and are the natural consequence of the mediaeval Vaisnava *Padavalis*. Shorn of unnecessary verbiage, they are pointed and simple in composition having the characteristics of folk-songs.

Sridhar Kathak, born at Bansberia (Magra P.S.) probably in 1816 was neither a *Kaviwalla* nor a writer of *Tappa* songs but a lyricist and singer. Instead of secular love themes as in *Tappa*, his songs were based on a devotional approach and the manner of presentation resembled the age-old *Kathakata* which was a lucid verbal exposition of Puranic themes to common listeners. In order to make the lessons of the Puranas attractive, *Kathakata* drew upon narration of interesting stories interspersed with songs sung in popular style. Sridhar used to compose his own songs and sing them in his own way, occasionally in *Tappa* style as well (because of its great popularity), in the course of his religious discourses. He soon earned renown in

his own select field and made his mark in composing devotional songs. He composed a number of *Tappa* songs also.

Kalidas Chattopadhyaya, popularly known as Kali Mirja, was born at Guptipara in 1750. With a natural bent for music, he became a keen student of different languages including Sanskrit. In order to learn Hindusthani classical music properly he visited Delhi, Lucknow and Banaras and learnt Hindi, Persian and Urdu. The appellation 'Mirja' was attributed to him because of his skill in Hindusthani classical music and knowledge of the Persian and Urdu languages. His wide scholarship enabled him to compose many songs on a variety of themes, both religious and secular. He composed *Tappa* songs closely imitating Nidhu Babu, devotional songs in the traditional way following Ramprasad, the father of Sakta *Padavali* and love-songs in his own way on the theme of Radha and Krishna.

CHAPTER XIV

MEDICAL AND PUBLIC HEALTH SERVICES

SURVEY OF PUBLIC HEALTH AND MEDICAL FACILITIES IN EARLY TIMES

Any survey of public health and medical facilities in early times against an Indian perspective is apt to lead one to two systems of medicines—the Ayurvedic and the Unani—commonly called the Hindu and the Muslim systems of medicine. Bharatkosh, the Indian Encyclopaedia, stresses that the growth of the Unani system, although mainly influenced by Hippocrates and Galen, borrowed a fairly large amount of its methodology from the Chinese and the Ayurvedic systems of medicine.[1] Lord Ampthill in his opening speech at the Kings Institute of Preventive Medicine at Madras in 1905 went a step further when he said, "Down to the close of the 17th century, European physicians learnt the science from the works of Arabic doctors while the Arabic doctors, many centuries before, had obtained their knowledge from the works of great Indian physicians such as Dhanwantari, Charaka and Susruta."[2]

Ayurvedic medicine

Acharya Prafulla Chandra Ray in his monumental work, the History of Hindu Chemistry, places the Ayurvedic period in Indian chemistry between 600 B.C. and A.D. 800. This period appears to have been dominated by the abstract theories of the Upanishadas which were developed as systems of various philosophies in the post-Vedic age, one of them branching out to be the Ayurveda. In the Brahmabaibarta Purana, Ayurveda has been extolled as the cream of the four Vedas constituting a fifth Veda by itself. It appears that knowledge of the human body and its illnesses were scattered all over the four Vedas.[3] Ayurveda means science of longevity and it is believed that Atharva Veda, which deals with the recipes for prolonging life, has given birth to it. But "there is little evidence of any notable addition to the knowledge and practice of chemistry since the days of Ayurveda to the time of Gautama Buddha."[4] Kautilya's Arthasastra refers to certain authentic records relating to the knowledge of chemistry, metallurgy and medicine in those days (321-296 B.C.). Thereafter, the Hindu system of medicine was arranged more or less on a rational basis and with a scientific terminology in the treatises Charaka Samhita and the Susruta Samhita dealing respectively with medicine and surgery.

"There is much controversy about the age of the Charaka and the Susruta. According to the Chinese version of the Tripitaka a physi-

cian named Charaka was attached to the court of the Indo-Scythian King Kanishka who reigned in the second century A.D. According to certain authorities, particularly M. Sylvain Levi, the authorship of the treatise Charaka Samhita is attributed to this Charaka. But it should also be noted that the appellation of Charaka occurs in Vedic literature, as a patronymic one. The theories and discussions in the Charaka and the Susruta, particularly in the Charaka, are based on the doctrines of the Samkhya system of philosophy, combined with a methodology derived from the Nyaya-Vaiseshika system. The Charaka, however, is not so systematic as the Susruta....This indicates that of the two, the Charaka is by far the more ancient. ...Agnivesa, whose work formed the basis of the Charaka Samhita, was the disciple of Atreya, who, according to a Buddhist Jataka, was a teacher of medicine in the University of Takshasila (Taxila) during the age of Buddha.

"From the considerations set forth above, it might be concluded that there should be little hesitation in placing the original work of Charaka in the early Buddhistic era, though P. C. Ray in his History of Hindu Chemistry prefers to place it in the pre-Buddhistic era.

"As regards the age of Susruta, the evidences are, however, comparatively definite. Its terminology and technique in general do not differ much from those of the Charaka. ...The extant Susruta is generally believed to be a comparatively modern recension by the celebrated Buddhist chemist, Nagarjuna (8th century A.D.) who is said to have added the Uttaratantra or the Supplement. ...According to a Buddhist Jataka, Susruta was a teacher in the University of Kasi (Banaras) during Buddha's time and was a younger contemporary of Atreya. Hence, though the original Susruta was composed somewhat later than the Charaka, there cannot be a great interval between the two. It should also be borne in mind that the extant Charaka and Susruta represent not only the chemical and therapeutical knowledge of the time of their final redaction, but they are also repositories of informations, accumulated on the subject, during the earlier periods dating back to the Vedic age."[5]

The Bower manuscript (second half of the 4th century A.D.), the Astangahridaya by Vagbhata (A.D. 800-850), works of Vrinda and Chakrapani (A.D. 975-1050), the Tantric School of Hindu medicine (A.D. 700-1300), and the revolutionary 'philosophy of mercury' invented in what has been called the Iatrochemical period (A.D. 1300-1550) bring the development of the Ayurvedic system to a well documented period of Indian history.

In course of time three distinguishable schools of Ayurveda came into existence: a purely intellectual school led it to a philosophical plane, a particularly religion-based branch gave birth to the Tantric school and a third, the latest, became the 'Kaviraji' wing. The Tantric school, which appears to have flourished in Hooghly district, was led

by the Natha Yogis who believed that human physiology played an important role in the Tantric practices. They attributed certain functional qualities to the human nerve system of their own conception. A knowledge of 'Shariratatwa' or physiology was a must for every member of the sect.[5] The areas of concentration of the Natha Yogis in the district were Mahanad and Dwarbasini. Shri Binay Ghosh in his work, *Paschim Banger Samskriti*, has fairly elaborately dealt with the characteristics of this school of Yoga and the importance of the use of mercury and sulphur in medicine.[6]

Hunter in his Statistical Account of Bengal has given a fairly exhaustive account of the *kaviraji* system of treatment followed in the then Hooghly district which, however, was not materially different from the practice obtaining elsewhere in the Province. To quote Hunter, "The drugs in the pharmacopoeia of the *kabiraj*, are derived alike from the vegetable, animal, and mineral kingdoms. Vegetable medicines are procured from the bark, root, leaves, flowers, fruit, seeds, juices, gum and wood of plants. Their effects are said to vary with the period at which they are gathered...and lucky days and hours are generally consulted by the *kabiraj* in collecting them. Medicines derived from the animal kingdom are prepared from skin, hair, nails, blood, flesh, bones, fat, marrow, bile, milk, and dejections such as urine and dung. ...Medicines derived from the mineral kingdom consist of metals and salts. Of the latter, rock salt, borax, *bitluban* and an impure soda are the principal. In former days, iron and tin were the only metals used in medicine by native physicians, but in more modern times, mercury, gold, silver, copper, lead and zinc have come more or less into general use. ...Of the minor minerals, talc, shells, diamonds, precious stones, sulphur and ammonia, enter largely into the preparations of the *kabiraj*. The forms in which medicines are administered by native physicians are as powders, pills, infusions and decoctions."[7] Hunter enumerates many of these preparations and mentions their supposedly curative effects. Regarding the basic diagnostic processes he comments, "The Hindu physicians compare the human body to a small universe, and maintain that, like the great universe, it has a creative, a preservative, and a destructive agency, in the shape of air, bile, and phlegm. The superabundance or diminution of these elements constitutes disease; and all maladies, according to them, arise from one of these causes. The therapeutic actions of me-

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[5] Binay Ghosh—*Paschim Banger Samskriti*. Calcutta, 1957.

[6] A search was made for Ayurvedic texts found in the district. No information was available from Bangiya Sahitya Parisad, Asiatic Society or Astanga Ayurveda Vidyalaya. However, Dinesh Bhattacharya mentions an Ayurvedic text, 'Chikitsa Ratnavali' (A.D. 1661) written by one Kavichandra and found with the Datta family of Dirghanga village near Baidyabati. He also refers to 'Sukhabodh' (A.D. 1702) supposedly written by one Baidyaraj of Basu-Ray family of Sugandha in Polba P.S. and recovered from London. Kayastha by caste, members of this family were personal physicians to Mughal rulers. ibid. p. 762.

dicines are also classed under the same three heads, according as they are supposed to cure defects of air, bile, or phlegm in the system. ...In the diagnosis of diseases, the *kabiraj* is guided by *touch*, *observation*, and *questioning*. He examines the pulse very minutely, and according to its beatings determines whether the air, bile or phlegm is at fault. ...He is very particular about diet, and never allows cold water to drink. Patients are generally made to abstain from food and from water, even when parched with thirst. Air is rigidly excluded from the sick chamber, and cleanliness is no object."[8] The last observation appears to be at variance with a report compiled at a much later time and recorded in the Hooghly Medical Gazetteer by Lt. Col. D. G. Crawford which says, "The Hindus, with the exception of the lowest castes. are cleanly in their habits..."[9] and then goes about recording such habits both at normal times and during illness.

In both the Hooghly Medical Gazetteer by Lt. Col. Crawford and the District Gazetteer, Hooghly by L. S. S. O'Malley and Monmohon Chakravarti published in 1903 and 1912 respectively, the Ayurvedic practices in this district have been dealt with in broad terms. Never theless, Lt. Col. Crawford listed 85 commodities which were in use as 'indigenous drugs' in the then Imambara Hospital and prepared a classified list of as many as 340 items of organic and inorganic materials in medicinal use and available in the Hooghly market.[10]

Regarding the popularity of the *kaviraji* system, it is somewhat surprising to note that Crawford, writing in 1903, had said, "The Hindu system of medicine is, in Bengal, to all intents and purposes dead and gone. Whatever interests it may have as a subject of antiquarian study, it has none as a living science."[11] But writing about a decade later O'Malley and Chakravarti made the contradictory observation—"the bulk of Hindus and Mohammadans have not yet lost faith in old systems of medicine, *Kabiraji* and *Yunani*."[12]

The Unani system

Like Ayurveda, the Unani system of medicine also went by the three fundamentals, air, bile and phlegm (*ruh*, *safra* and *bulgum*) and collected its drugs from the mineral, vegetable and animal kingdoms. Originating in Central Asia, it naturally picked up those plants to choose its medicine from which were common in that region. Basically, this system also depended on outer physical symptoms for its diagnosis. In Arabic ancient Greece was known as Unan and Hippocrates (460-357 B.C.), who practised and taught medicine in Athens, being the early originator of this system, it came to be associated with the name of his country as the Unani system. Writing about its popularity in Hooghly district, Lt. Col. Crawford remarked in 1903, "The Yunani or Musalman system of medicine is now, I believe, little practised in this district. There is a large well-equipped Yunani dispensary in the Imambara buildings, at Hughli, under the charge of a skilled practitioner of the system from Lucknow, which is resorted to by the Musalmans of Hughli town."[13] It is pertinent to

point out in this connexion that as early as in April 1837, some 66 years before Mr. Crawford published his well-known work, a letter[14] was published in one of the journals of that time, *Samaj*, which praised the efforts of Dr. Wise in starting a hospital for both Hindus and Muslims out of the Imambara Trust created by Hazi Mohammad Mohsin and gave a list of the medical practitioners serving there which was as below.

Character of the Medical Practitioner	No. Employed	Monthly Pay
Muslim Hakim	1	Rs. 75
Hindu *Kaviraj*	1	Rs. 30
Assistant *Kaviraj*	1	Rs. 8
Compounder	2	Rs. 12
Mohori	1	Rs. 5

This, coupled with the excerpts from the Bengal District Gazetteers, Hooghly, quoted earlier, does not seem to substantiate Crawford's statement.

Other systems

Both Crawford and Hunter have referred to eye operations for removal of cataracts prevalent in the district in their times and undertaken by uneducated but skilled practitioners, generally from the rank of barbers. Another form of treatment—which can hardly be called a system of medicine and was designated the 'religious system' by Crawford—was to seek benedictions of the gods for effecting magical cure of ailments This popular and comparatively inexpensive practice resorted to by the credulous gave rise to various deities supposed to preside over special diseases, e.g. Sitala who could prevent and cure small-pox and *Olabibi* who could similarly deal with cholera. The Tarakeswar temple has been a historical seat for such miraculous cures and continues to be one till today.

Medical Geography

"The climate of Hugli, like that of the neighbouring Districts, may be divided into three seasons, the cold, hot and rainy. During the cold season, the wind invariably blows from either the north or west; in the hot months, the prevailing winds are from the south; and in the rainy season, from the east."[15] According to O'Malley and Chakravarti, "The climate is hot, moist and relaxing. The surface is but little above sea-level, and many of the rivers have silted up to such an extent that, after the rains, they are represented by a series of stagnant pools or have only an attenuated sluggish stream. During the monsoon, from July to September, vegetation is rank, and the water becomes thick and muddy. The result of such unfavourable conditions is that in September fever, with bowel complaints, breaks out in an epidemic form and continues to be more or less virulent till the middle of January. The general health then improves till March.

During the hot weather the sources of water-supply are apt to dry up, producing epidemics of cholera and dysentery. Towards the end of May and the beginning of June the weather becomes oppressive, hot and sultry heralding the approach of the monsoon. May to July are, on the whole, the healthiest months, and then the period from the middle of January to the middle of March. November and December are the two worst months when the mortality is heaviest. The least unhealthy area is the Arambagh subdivision, especially the flood-swept tract east of Dwarakeswar and the west of the Damodar. ...The most unhealthy part of the district is the Hooghly subdivision, especially Balagarh thana and the inland thanas of Dhaniakhali, Polba, and Hooghly (rural)."[16]

Things have obviously changed with the progress of medical science and the adoption of health measures both at public and private initiative. The chief determinants of the medical geography of the district in recent times have been the topographical changes, silting up of river channels, occasional droughts and the periodic floods which were of frequent occurrence until very recently.*

Malaria

It is significant that the malarial epidemic which ravaged parts of Hooghly district for several years since 1861 (better known as the 'Bardwan' or 'Nadia' fever in the parlance of medical history), was very closely associated with geographical changes in the district. Dr. J. Elliot, Civil Assistant Surgeon of the district, in submitting his now famous report on the 'Nadia fever' in the beginning of January 1863, classified the causes of the disease under 9 categories, 5 of which were geographical in nature. They were (1) the sites of villages: the worst hit being those on the banks of stagnant rivers filled with vegetation and weeds; (2) nature of adjoining lands: want of cultivation on them led to the growth and decay on such lands of thick vegetation; (3) overcrowding of houses: this obstructed paths and drains and prevented ventilation; (4) bad water: insufficient supply of pure drinking water caused by the paucity of good tanks and the indiscriminate bathing of animals and washing of clothes in them; (5) complete absence of drainage.

In March, 1869 Shri Joykissen Mokherjee[17] of Uttarpara submitted to the Government of Bengal a memorandum on behalf of the zemindars of the two adjoining districts of Hooghly and Burdwan wherein the following geographical factors were mentioned, *inter alia*, as the causes of the malarial epidemic: "(1) The silting up of all the rivers which formerly drained the country, much increased by the

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* The climatic characteristics of the district have already been adequately dealt with in Chapter-I. The scope of this chapter is restricted to the discussion of those factors alone which have their impact on the state of public health in the district. It is to be noted that although the more important epidemics have been accounted for later in this chapter as part of the medical history of the district, the geographical dimensions thereof are separately treated below.

construction of the *bund* along the east side of the Damudar, and the consequent prevention of the scouring of the old river-beds by the floods from that river. ...(2) The impregnation of the soil by human excreta for centuries; the villages which have suffered most being usually the oldest, and those which have been longest inhabited. (3) Want of good drinking-water, tanks excavated in former days having mostly silted up and become shallow, and their water impregnated with decomposing animal and vegetable matter."[18]

The foregoing observations found technical support from Dr. D. B. Smith, Sanitary Commissioner, Bengal, who submitted two reports on the epidemic in March, 1868 and May, 1870. He said: "In an alluvial tract like the Hughli district, changes are continually occurring in the physical features; rivers and watercourses of all kinds and sizes are in a state of constant variation. *Khals*, *bhils*, and tanks silt up. Streams become sluggish, natural drainage channels are altered or become altogether obstructive, levels of water and even of soil are greatly modified; the subsoil, from being normal, becomes water-logged; animal and vegetable decomposition increases."[19] Dr. Smith also quoted the then Magistrate of the district who had observed elsewhere that "the aggravated sickness in the district commenced within a year or two of the final closing of the Damudar *khals*." and recommended a comprehensive survey with pointed attention to "the influence of the *bund* on the eastern bank of the Damudar, as compared with what obtains beyond its western bank; the condition of the Kana and Kunti *Nadis*, and of the Saraswati, Magra, Bali and Baidyabati *khals;* the level of the beds and of the surface water of all rivers and main water-courses in the district: general or local obstructions of drainage, how produced, the best means of rectifying them; the position, state and level of roads, railway embankments, bridges, *bunds*, and drainage outlets; how the vicinity of village sites might be improved; how the depletion of *bhils*, swamps and the like could best be effected; and in what direction catch-water drains might be useful, and where escape channels are required."[20] These recommendations, pre-eminently of a geographical nature and coming from an expert on public health and sanitation, lend great importance to the medico-geographical aspect of the district. A very significant tabulation based on an official report was prepared in 1873 correlating epidemic mortality with the geographical location of the affected areas in Hooghly district which established that of the 28 recorded villages where the epidemic was at its worst almost all were either in the vicinity of silted up rivers or *khals* or suffered from acute scarcity of drinking water.[21]

The socio-geographic history of the district over the last several decades has largely diminished the incidence of malaria in the district. Large scale urbanization, proper control of the Damodar through the agency of the Damodar Valley Corporation, the opening up of

a wide network of roads throughout the district, not to speak of much better public health and sanitary measures, have considerably altered the conditions from what they had been towards the close of the preceding century. Epidemics are now a rarity. Regional variations of the nutritional level still exist but they are more related to economic rather than territorial (i.e. geographical) factors.

Medical history

"After the rainy season of 1806 an epidemic prevailed in the neighbourhood of Hooghly, which carried off a great many of the natives. It was probably, . . . a severe outbreak of malarious fever. Except this and the outbreaks of sickness and disease which generally followed the numerous floods, the Hooghly district appears to have been remarkably free from epidemics, and to have had a high reputation for the salubrity of its climate."[22] This rather complacent picture of health conditions in the district was sadly undermined by the great malarial epidemic which ravaged the Nadia, Burdwan and Hooghly districts subsequently.

Burdwan or Nadia fever

"The malarious fever, which since 1861 has been raging in Hugli and Bardwan, is the principal endemic disease in the District. This fever is reported to have made its first appearance in 1824 or 1825 at Muhammadpur, then a thriving village in Jessore District. It broke out as an epidemic among a body of prisoners employed in road-making. After ravaging Muhammadpur, and completely desolating that once prosperous little town, the fever gradually spread over the whole of Jessore; subsequently, in 1856, it appeared in Nadiya, and in 1861 in 24 Parganas, carrying death and destruction along with it. In the same year it crossed the Hugli, and first showed itself in the populous and thriving villages of Bansbaria, Tribeni and Naya Sarai in Hugli District. In the following year it extended its ravages westward, and appeared at Pandua. ...Since the first outbreak, the fever has been continually extending its ravages from village to village and there is now hardly a spot in the entire District which has not been visited by the plague."[23] The nature of the disease was described by the Inspector General of Hospitals in his Report on the Charitable Dispensaries of Bengal for 1871, as "an aggravated form of the ordinary malarious fevers of the country and season. The symptoms are indeed more violent, the prostration more rapid and grave, the complications earlier in their appearance and more severe in their character, and the sequelae more common and serious. Still there is nothing to show that either symptoms, complications, or sequelae differ in any other respect than in degree from the usual autumnal malarious fever of the province. ...Another peculiarity of the severe form of fever is that, under whatever circumstances or after whatever interval these repetitions occur, the subsequent attacks partake of the malignity of the original seizure. The disease is therefore a doubly formidable one,—severe in its primary incidence and in its secondary manifestations, and life is imperiled both by the

violence of the first attack and the sapping effects of repeated seizures. The amount of sickness and mortality thus caused has been such that neither description nor statistics fully represent it. ...The loss of health and life which a community, subjected during successive seasons to the influences causing this fever, undergoes, must be very appalling. The estimate that three-fourths of a village population has been prostrated and disabied by the onset of the malady is a very common one; and the mortality of a recent outbreak is said to amount in a few months to one-third of the original strength of the community, and in the long run amounts to one-half or more."[24]

Both Mr. Hunter and Lt-Col. Crawford have given detailed lists of affected villages and the mortality figures for each. Crawford's list* included as many as 136 villages of which the more prominent are mentioned below citing against each the respective total populations and casualties: Keota (Hooghly town) (1,940 and 468); Pandua (6,961 and 5,222); Rajhat (2,500 and 1,400); Dwarbasini (2,743 and 1,959); Balagarh (9,755 and 2,271); Dwarhatta (4,182 and 3,045); Sonatikri (900 and 700); Baligari (1,937 and 1,284); Paramba (3,125 and 2,169); Shahbazar (3,519 and 2,176) and Somaspur (3,859 and 2,737).

A number of steps were taken to fight the scourge. "Government relief has been granted to the sufferers on an extensive scale. Fever dispensaries were established at the larger centres of population, and an itinerant dispensary in the rural tracts, moving about from village to village, wherever the fever was severe. In 1869, 14 dispensaries were in operation, at which 48,744 persons received gratuitous medical aid, at a total cost to Government of £700. ...† With regard to

* Crawford—op. cit., pp. 155-9.

† The following table is taken from the Hughli Medical Gazetteer (p. 164) which enumerates the epidemic dispensaries at work in Hooghly district in 1872 and the number of patients treated:

Location	Date of opening	Date of closing	Total treated	Remarks
Dhaniakhali	7.11.1871	Still open*	31,519	*At date of report
Balagarh	8.11.1871	29.2.1872	2,352	
British Chandernagore	12.11.1872	20.2.1873	1,498	
Hasnan	15.4.1872	15.4.1873	20,902	
Khanakul	1.10.1872	Still open*	3,136	
Haripal	Dec. 1872	Ditto	1,190	
Badinan	27.5.1872	1.12.1872	2,260	
Gurap	15.11.1872	15.4.1873	1,622	
Singur	Dec. 1871	April 1872	2,663	
Kristonagar	Dec. 1871	Still open*	6,022	
Baidyabati	Jan. 1872 Nov. 1872	April 1872 Still open*	1,740 —	A permanent dispensary
Rishra	Dec. 1872	Ditto	716	
Bandipur	June 1872	Ditto	1,828	
		Total	77,448	

the mode of treatment, the Civil Surgeon of the District reports that quinine, although it does much to check the accession of fever as an anti-periodic, is ill-suited to the constitution of the ill-fed labouring population. He is of opinion that the poorer classes are more amenable to treatment by native than by European medicines. He states that the former, if prepared strictly after the directions given in Hindu medical works, are of equal value with the costly European remedies."[25]

"The total duration of this epidemic of fever in the Hooghly district may be said to have been 20 years, viz., from 1857 to 1877, though its ravages did not last for so long in any one place, the usual duration of the fever in each of the villages attacked being from three to seven years. The mortality was enormous, being estimated by various observers at from one-third of the whole population up to nine-tenths in certain very severely affected places."[26] The Epidemic Commissioner of the time, making an on-the-spot study, was reported to have seen "scores of corpses, mangled and dismembered by dogs, jackals and vultures, lying in the streets of Dwarbasini and other villages, in which the ravages of the epidemic had then but newly commenced."[27]

Cholera

Cholera visited the district in an epidemic form from March to May in 1884 and again from November to May in 1884-85. The areas affected were mostly riverine and lay in the Hooghly, Serampore, Uttarpara, Khanakul and Balagarh police stations. Its visitations were repeated in 1891 (January to April) and 1895 (November to July 1896). In 1900 and 1901 the disease hit the Hooghly-Chinsura town severely.

Medical organization

It appears from old records that the first medical officer stationed at Hooghly was Ralph Harwar who was succeeded in 1676 by Robert Douglas. Crawford gave a list of Civil Surgeons of Hooghly from 1813 to 1900.[28] Prior to this period the Civil Surgeons were designated 'Surgeon to the Collector' and, by inference, possibly attended only to the Collector and the Britishers living in the district. The first man so catalogued by Crawford was a Henry Stuart who served for a term up to 1787.

Among the most notable of the early Civil Surgeons was Dr. T. A. Wise, M.D., F.R.C.S. (1829-39), the founder of the Imambara Hospital and one of the founders of the Hooghly College, of which he was also the first Principal from 1836 to 1839. His works—A Commentary on the Hindu System of Medicine (Calcutta, 1845), Cholera: Its Symptoms, Causes and Remedies (Cork, 1864) and Review of the History of Medicine (two Volumes, London, 1876) were valuable contributions. It appears that the early Civil Surgeon of Hooghly occasionally discharged non-medical responsibilities attached to the post of a principal of a college, a Presidency Surgeon at Calcutta, even a Post Master or a Registrar besides serving the fighting forces. But their main duties centred round the Imambara Hospital and the elite of the Hooghly township. The first Indian Assistant

Surgeon at Hooghly was Badan Chander Chaudhuri who served from 1853 to 1863.

There was another post of a Civil Medical Officer at Serampore and the first British incumbent to hold it between 1857 and 1865 was Dr. T. Bray. He was succeeded by Sub-Assistant Surgeon, Dr. Dwarkanath Chatterjee, the first Indian to act as Civil Medical Officer at Serampore for nearly 5 years.

The functions of Civil Surgeons being limited only to the curative side of public health its preventive aspect was entrusted, under Bengal Act III of 1885, to the District and Local Boards and later to the Union Boards established under Bengal Act V of 1919.* A District Health Officer, whose establishment costs were shared by the District Board and the Provincial Government, was appointed under the District Board for this purpose. Such was the state of public health administration in the district till the attainment of independence in 1947. In 1946 the Provincial Government had appointed the Bhore Commission to go into the structure of public health organization and on its recommendation both the curative and preventive sides of public health in a district were unified and entrusted in 1958 to the Chief Medical Officer of Health who replaced the erstwhile Civil Suregon. The C.M.O.H. is now assisted by two key officers for the two branches—the District Medical Officer looking after the curative and the District Health Officer the preventive aspects of public health.

Vital Statistics

Demography

The decade beginning with 1901 saw a marginal increase of 1.4 per cent in the population of the district, the impact being most marked in the Serampore and Sadar subdivisions. During this decade no cholera or small-pox epidemic was on record and the malignant Burdwan fever had disappeared. The following table[29] shows the decennial variations of population in the district since 1901. The marginal growth recorded between 1901 and 1911 is believed to be mainly due to immigration. The numerous factories and brick-fields coming up along the Bhagirathi created a constant demand for up-country labour and the average number of operatives in registered factories rose by about 10,000 between 1901 and 1911 while the increasing wealth of the cultivators enabled them to employ outside labour.

DECENNIAL VARIATION OF POPULATION IN HOOGHLY DISTRICT

Year	Population	Decennial variation	Decennial percentage variation
1901	10,75,872	—	—
1911	11,15,390	+ 39,518	+ 3.7
1921	11,05,565	— 9,825	— 0.9
1931	11,41,517	+ 35,952	+ 3.3
1941	14,16.013	+2,74.496	+24.0
1951	16,04,229	+1,88,216	+13.3
1961	22,31,418	+6,27,189	+39.1

* For details see Chapter XII on Local Self-Government.

During the next decade the district suffered a population loss of about 0.9 per cent chiefly due to an outbreak of influenza which affected other parts of West Bengal also. The rural areas, west of the Serampore industrial belt and especially the Arambagh subdivision, suffered more than the industrial areas. Birth-rates fell considerably and death-rates rose to 47.2 per cent in 1918 but went down to 36.1 per cent in 1919 and 35.6 in 1920.

By 1931 there was a population increase of 3.3 per cent in the district and in the urban areas at least it can be ascribed partly to better public health and sanitation measures including supply of pure drinking water. The new rice mills in Magra and Pandua police stations led to some immigration the incidence of which was the heaviest in Uttarpara P.S. due to an increase in the number of brick-fields and the construction of the Willingdon Bridge and the Howrah-Burdwan Chord line of the Eastern Railway.

The 1931-41 decade was a period of steady increase in population, the growth being ascribable to natural causes as also to immigration following rapid industrialization consequent upon the Second World War. In the next decade (1941-51) the growth rate was maintained although it fell by about 6.7 per cent in relation to that in the immediately preceding one. Shri A. Mitra, the then Superintendent of Census Operations, West Bengal, by contrasting the percentage of children to total married women of the 15-40 age-group had observed that the percentage 95.1 plainly bears the stamp of the epidemics of 1944 following the Bengal famine of 1943. The partition of the province came in 1947 resulting in a colossal movement of migrants from East Pakistan which continued in the following decade (1951-61) showing a record growth rate of 39.1 per cent.

A significant picture of this overall demographic mobility emerges when the subdivisions and police stations experiencing the highest impact of both plus and minus mobility are picked out for observation. *The following table*[30] *is prepared on that basis:*

SUBDIVISION AND POLICE STATIONWISE DECENNIAL MINI-MAXIMAL PERCENTAGE VARIATION

Period	Area	Decennial Percentage Variation
1901-11	Chandernagore subdivision	+ 11.8
	Arambagh subdivision	− 3.2
	Uttarpara police station	+ 98.2
	Pursura police station	- 6 0
1911-21	Chandernagore subdivision	+ 7.3
	Arambagh subdivision	-- 10.8
	Bhadreswar police station	+127.7
	Goghat police station	— 15.2

SUBDIVISION AND POLICE STATIONWISE DECENNIAL MINI-MAXIMAL PERCENTAGE VARIATION.—*contd.*

Period	Area	Decennial Percentage Variation
1921-31	Serampore subdivision	+ 5.1
	Arambagh subdivision	+ 2.0
	Uttarpara police station	+104.8
	Serampore police station	− 18.6
1931-41	Serampore subdivision	+ 28.6
	Arambagh subdivision	+ 19.6
	Serampore police station	+ 91.3
	Uttarpara police station	− 34.4
1941-51	Chandernagore subdivision	+ 17.3
	Arambagh subdivision	+ 7.5
	Uttarpara police station	+ 35.6
	Chanditala police station	+ 4.7
1951-61	Sadar subdivision	+ 45.6
	Chandernagore subdivision	+ 31.2
	Magra police station	+ 58.3
	Singur police station	+ 18.6

It is significant to note that since 1941 both the minimum and maximum variations are in plus terms and in the decade 1931-41, although Uttarpara police station showed a minus figure, the subdivision to which it belongs, Serampore, showed the maximum plus figure, possibly the decrease in Uttarpara being offset by the remarkable increase in the Serampore P.S. Another notable point is the 50-year old tradition of the Arambagh subdivision's virtually maintaining the minimum mobility figure (both in plus and minus terms) all through 1901 to 1951.

While total demographic mobility in a given area is governed both by internal and external factors, the birth and death-rates can be more precisely attributed to internal factors alone. The following table[31] giving intrinsic figures of births and deaths as also their rates per thousand are based on a 20-year period from 1941 to 1960.

BIRTH AND DEATH-RATES IN HOOGHLY DISTRICT : 1941-60

	Births (1941-50)	Birth-rate per thousand (1941-50)	Deaths (1941-50)	Death-rate per thousand (1941-50)	Births (1951-60)	Birth-rate per thousand (1951-60)	Deaths (1951-60)	Death-rate per thousand (1951-60)
Male	1,61,969	11.8	1,21,129	16.4	1,87,081	11.66	70,356	8.26
Female	1,46,894	10.7	1,12,077	17.5	1,70,509	10.63	59,135	7.86
Total	3,08,863	11.25	2,33,206	16.95	3,57,590	11.15	1,29,491	8.06

A steady growth of births over deaths during these two decades is apparent from the table. The female birth and death figures are smaller than those of males. While during the 1941-50 period there were 906.9 female births and 925.3 female deaths per 1,000 male births and deaths, in 1951-60 there were 911.42 female births and 840.26 female deaths in the district for every 1,000 male births and deaths.

The table[32] below shows the birth and death-rates at the turn of the century. Although they are not accurate according to current standards, they nevertheless provide an interesting contrast with the present conditions.

Period	Area	Birth-rate per thousand	Death-rate per thousand
1893	Hooghly-Chinsura Municipality	28.42	50.43
to	Bansberia Municipality	26.89	50.02
1902	Arambagh	27.89	38.30

The preponderance of death-rates over birth-rates compares very unfavourably with what obtains now underlining perhaps the development of the public health organization meanwhile.

Infant mortality

In Hooghly district, as also elsewhere, children constitute the largest single component of the total population as will be evident from the following table classifying the 1961 population of the district (22,31,418) under various age-groups.[33]

DISTRIBUTION OF THE POPULATION OF HOOGHLY DISTRICT ACCORDING TO AGE-GROUPS

Age-Group (Years)	Number
0—5	4 22,238
6—10	3,36,282
11—15	2,06,554
16—20	2,10,444
21—25	2,05,741
26—30	1,93,136
31—35	1,29,777
36—40	1,43,968
41—45	92,776
46—50	91,431

Because of their physical immaturity and large numbers, the mortality hazards of children are much greater than those of people in higher age-groups. The following table[34] brings out the relative

proportions between death and infant mortality in the district for the 1951-60 decade.

INFANT MORTALITY IN HOOGHLY DISTRICT: 1951-60

Year	Total deaths	Infant mortality	Infant death-rate per thousand
1951	16,280	2,719	86.52
1952	14,126	2,730	80.44
1953	13,865	3,012	83.6
1954	12,358	2,572	69.2
1955	12,377	2,572	68.12
1956	11,892	2,337	55.86
1957	13,706	2,383	63.95
1958	12,649	2,152	60.74
1959	9,723	1,581	47.62
1960	12,516	1,886	56.19

The table shows an unmistakable decrease in infant mortality during the period under review. In 1961, 1962, 1963 and 1964 the infant mortality figures were 1,669, 1,599, 1,882 and 1,286 respectively confirming more or less the same downward trend. The old Hooghly District Gazetteer (1912) recorded: "Infant mortality is high, and it is estimated that more than a third of the children die within five years of birth."[35] Four decades later the Hooghly District Handbook lamented: "Infant mortality as well as death at child birth are high."[36] Yet from 1912 to 1951, infant mortality per thousand did improve from 333 to 86.

Compilation of vital statistics

"Prior to 1892 there were so many changes in the system of registering vital statistics, that it is unsafe to draw any inferences from the figures compiled before that year. ... The returns now (1912) prepared are also, it is true, not so reliable as could be desired, but they are sufficiently accurate for calculating the comparative growth of the population and for gauging the relative healtniness and unhealthiness of different years."[37] One is apt to doubt this finding inasmuch as the compilation of vital statistics has long been an entirely casual and voluntary affair both on the part of the informants as also on the part of the collecting agencies, viz. the village chowkidars, the local self-government institutions and Government hospitals. It was, therefore, no wonder that as late as in 1952 A. Mitra observed: "Vital statistics . . . continue to be unsatisfactory. As a result, it is not possible to recount with certitude the diseases in the order in which they take the highest tolls."[38]

With a view to strengthening the compilation machinery, a scheme was taken up in January 1959 for setting up Model Health and Ideal Registration Units in selected Unions of the district where Health Centres were functioning, recording of vital statistics by the teaching medical institutions and half-yearly censuses of births and deaths in selected urban and rural areas. The main defect of the scheme was that it covered only a fraction of the total area rendering the collected data no more accurate or reliable than those obtained in sample surveys. The Annual Administrative Report on the State of Health in West Bengal for 1963 published by the State Directorate of Health classifies 7 types of registration units: (*i*) Registrars of births and deaths in municipal areas, (*ii*) Sanitary Inspectors, (*iii*) Medical officers of rural health centres, (*iv*) Officers in charge of police stations, (*v*) Railway Station Masters, (*vi*) Staff of the Basic Public Health Units and (*vii*) others. Of these, the 4th, 5th and 7th categories did not have sufficient experience of the work during 1961, 1962 and 1963. The official report, therefore, had to conclude that even in 1963 the system of registration of vital statistics did not attain optimum efficiency. In fact, the area covered by these agencies leave out extensive tracts where compilation of vital statistics is still the responsibility of Gram Adhyakshas and their chowkidars. Since 1963 pilot projects have been initiated jointly by the Directorates of Health and of Panchayats under which Gram Adhyakshas have been supplied with 'hathchitas' for recording of all births and deaths within their respective areas independent of any official registration system. This project is still in an experimental stage. All this will tend to show that health statistics have still to be taken with a grain of salt.

Deaths from selected causes

Another method of analyzing mortality is to study the causes of death. The following table[39] sets forth the actual number of deaths (as also the corresponding rates) from various diseases during the decennial periods, 1941-1950 and 1951-1960.

DEATHS FROM SELECTED CAUSES IN HOOGHLY DISTRICT: 1941-60

	1941-50		1951-60	
	Actual deaths	Death-rate	Actual deaths	Death-rate
Cholera				
Male	3,738	0.5	1,222	0.13
Female	3,905	0.6	1,163	0.16
Fever				
Male	47,015	6.4	16,855	1.84
Female	47,938	7.5	16,281	1.84
Smallpox				
Male	2,668	0.4	1,279	0.14
Female	2,848	0.4	1,203	0.14

DEATHS FROM SELECTED CAUSES IN HOOGHLY DISTRICT: 1941-60.—*contd.*

	1941-50		1951-60	
	Actual deaths	Death-rate	Actual deaths	Death-rate
Dysentery, Diarrhoea & Enteric group of Fevers				
Male	14,378	1.9	7,032	0.77
Female	14,525	2.3	7,122	0.8
Respiratory diseases other than T.B. of lungs				
Male	17,477	2.4	8,139	0.89
Female	10,228	1.6	3,902	0.44
Suicide				
Male	582	0.1	701	0.08
Female	672	0.1	744	0.08
Child birth				
Female	2,283	0.4	1,483	0.2
Malaria				
Male	25,331	3.5	3,835	0.42
Female	26,548	4.2	3,590	0.41
Kala-azar				
Male	1,210	0.2	401	0.04
Female	861	0.1	350	0.04
T.B. of lungs				
Male	3,151	0.4	2,615	0.28
Female	1,135	0.2	914	0.1
Snake-bite				
Male	739	0.1	613	0.07
Female	664	0.1	412	0.05

The first conclusion that may be drawn from the above table is that incidence of all the listed diseases has perceptibly gone down during the second decade, the most marked decrease being in the case of cholera, smallpox, malaria, the enteric and the respiratory groups of diseases and fever. It should be pointed out that 'fever', which claims the largest number of deaths in both the decades, is a generic term covering a number of diseases either not diagnosed or not more closely recorded.[40] It has, therefore, a greater incidence than single-

cause diseases like cholera or smallpox. In 1941-50 malaria was the second most prevalent disease followed by the enteric group, the respiratory group, cholera, smallpox and T.B. of lungs whereas in 1951-60 malaria was rather in the background occupying the fourth position after the enteric group and the respiratory group and was followed by T.B. of lungs, smallpox and cholera. This tends to prove that malaria had been fairly effectively controlled during the second decade. The table also establishes that certain modern afflictions of urban origin like T.B. of the lungs and suicide and rural mortality due to child birth and snake-bites show only a marginal decrease.

Although not strictly accurate, the mortality figures for the district recorded at the end of the last century may provide an interesting contrast with those of recent times. In the comparative table below, the earlier figures are taken from the Hughli Medical Gazetteer by Crawford who had tabulated figures relating to births, deaths and specific causes of death from 1879 to 1898.[41]

DEATHS FROM SELECTED CAUSES: COMPARISON BETWEEN 1879-98 AND 1941-60

	1879-98	1941-60
Malaria	19,068	1,495
Cholera	1,566	251
Dysentery, Diarrhoea etc.	2,281	1,087
Smallpox	79	200

This table also demonstrates the great improvement effected in controlling malaria, cholera and the enteric group of diseases. Smallpox does not seem to be on the wane and this point will be discussed later. It should, however, be pointed out that the visitation of the 'Burdwan fever' epidemic fell within the earlier period inflating the malarial mortality abnormally. On the other hand, it is more than probable that due to the comparative inadequacy of the machinery compiling vital statistics the figures recorded in the earlier period were less than what they had actually been.

Statistics brought up-to-date

Between 1961 and 1964 (incidentally, figures for 1964 are the latest available with the Bureau of Health Intelligence, West Bengal) a steady progress was recorded in general health conditions. The following table compiled from different annual reports[42] of the Health Directorate, Government of West Bengal shows the mortality from specific causes in absolute numbers as also the rates calculated on the annual death-rates per 1,000 population according to the 1961 census.

DEATH FROM SELECTED CAUSES IN HOOGHLY DISTRICT: 1961-64

	1961		1962		1963		1964	
	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate
Pulmonary T.B.	128	0.1	104	0.04	105	0.04	75	0.03
Respiratory T.B.	250	0.1	286	0.1	289	0.01	259	0.1
T.B. of Meninges	303	0.1	4	—	—	—	2	—
Syphilis	14	0.01	—	—	1	—	—	—
Cholera	165	0.1	90	0.04	264	0.1	91	0.04
Dysentery	471	0.2	639	0.3	594	0.3	497	0.2
Leprosy	41	0.02	54	0.02	32	0.01	16	—
Smallpox	7	—	14	0.01	758	0.3	64	0.03
Malaria	78	0.03	45	0 02	26	0.01	11	—
Kala-azar	15	0.01	9	—	3	—	3	—
Typhoid	226	0.1	227	0.1	219	0.09	165,	0.07
Malignant Neoplasm	154	0.1	218	0.09	226	0.1	179	0.07
Diabetes	19	0.01	26	0.01	33	0.01	85	0.04
Metabolic and Nutritional Diseases	1,087	0 5	1,193	0.5	1,289	0.5	1,031	0.4
Anaemia	132	0.1	204	0.09	230	0.1	198	0.08
Influenza	32	0.01	45	0.02	25	0.01	18	—
Pneumonia	493	0.2	507	0.2	551	0.2	373	0.2
Gastritis etc.	255	0.1	240	0.1	298	0.1	222	0.09
Child birth	83	2.6	132	3.6	116	2.9	91	2.4
Early Infancy diseases	1,114	0.5	884	0.4	953	0.4	644	0.3
Senility etc.	5,105	2.3	6,424	2.8	6,380	2.7	5,069	2.1
Suicide	119	0.05	112	0.05	94	0.04	82	0.03
Accidents	350	0.2	400	0.2	401	0.2	335	0.1
Snake-bite	88	0.04	92	0 04	91	0.04	81	0.03
Total from all Causes	11,904	5.3	13,416	5.8	14,478	6.1	11,130	4.6

The earlier deductions from tables relating to previous periods almost hold good here as well. The causes claiming the highest number of victims are senility etc., metabolic and nutritional diseases and diseases peculiar to infants. Tuberculoses of different descriptions are largely attributable to maladjusted urbanization from

which an industrial district like Hooghly obviously suffers. Diabetes, again, is an urban disease and though marginal, is growing in incidence. Typhoid, dysentery and cholera originate primarily from insanitation, another scourge of congested urban life. Incidence of smallpox, although heavy in 1963 appears to be of temporary nature and malaria seems to have been definitely controlled. Deaths from suicide and accidents have also an urban background and they continue to take their toll side by side with such rural afflictions as snake-bites etc.

DISEASES COMMON TO THE DISTRICT

The following table is compiled from the annual administrative reports[43] of the Health Directorate, Government of West Bengal and gives the number of outdoor and indoor patients treated in various medical institutions of the district and their respective mortality rates. Admittedly, the number of patients surveyed here is smaller than that in the whole district who may seek other means of treatment. Nevertheless, the figures being based on a fairly large population may be taken as representative.

PATIENTS TREATED IN HOSPITALS OF HOOGHLY DISTRICT AND DEATHS FROM SPECIFIC CAUSES : 1961-1964

Name of Disease	1961	1962	1963	1964
Pulmonary T.B.				
Outdoor	4,037	3,095	3,353	3,349
Indoor	64	387	423	459
Death	17	32	41	52
Respiratory T.B.				
Outdoor	106	182	225	201
Indoor	9	41	42	48
Death	4	1	3	2
T.B. of Meninges				
Outdoor	76	196	175	195
Indoor	4	15	27	25
Death	4	8	7	5
Other forms of T.B.				
Outdoor	684	870	1,008	1,336
Indoor	21	129	169	121
Death	8	4	6	7
Syphilis				
Outdoor	903	2,355	929	1,536
Indoor	—	10	3	2
Death	—	—	—	—

PATIENTS TREATED IN HOSPITALS OF HOOGHLY DISTRICT AND DEATHS FROM SPECIFIC CAUSES: 1961-1964.—*contd.*

Name of Disease	1961	1962	1963	1964
Cholera				
Outdoor	321	361	443	316
Indoor	79	174	532	295
Death	37	35	113	89
Dysentery				
Outdoor	32,099	78,347	1,00,443	98,280
Indoor	200	844	970	1,186
Death	37	51	38	59
Leprosy				
Outdoor	321	476	377	124
Indoor	1	7	3	10
Death	—	—	1	—
Smallpox				
Outdoor	121	63	47	258
Indoor	—	2	27	4
Death	—	—	16	2
Malaria				
Outdoor	1,642	1,866	2,067	799
Indoor	7	41	36	19
Death	—	—	—	—
Kala-azar				
Outdoor	7	171	115	157
Indoor	2	2	5	3
Death	—	—	1	—
Typhoid				
Outdoor	2,269	4,450	4,961	5,581
Indoor	88	598	878	739
Death	11	17	13	8
Neoplasm Group of Diseases				
Outdoor	10,548	13,098	13.921	11,628
Indoor	26	73	113	81
Death	13	15	24	13

PATIENTS TREATED IN HOSPITALS OF HOOGHLY DISTRICT AND DEATHS FROM SPECIFIC CAUSES: 1961-1964.—*contd.*

Name of Disease	1961	1962	1963	1964
Diabetes				
Outdoor	398	1,082	1,959	1,524
Indoor	5	31	33	35
Death	—	4	5	1
Metabolic & Nutritional Diseases				
Outdoor	21,011	27,190	36,098	38,663
Indoor	46	192	161	156
Death	13	12	14	21
Anaemia				
Outdoor	15,928	18,746	22,435	24,308
Indoor	154	617	692	714
Death	39	49	42	83
Influenza				
Outdoor	97,162	13,214	18,732	10,135
Indoor	70	514	375	363
Death	—	2	3	2
Pneumonia				
Outdoor	5,172	6,071	6,391	6,154
Indoor	65	339	446	371
Death	30	40	51	71
Gastritis etc.				
Outdoor	19,070	16,684	14,982	14,243
Indoor	30	198	282	232
Death	—	1	—	3
Diseases during Child-birth				
Outdoor	15,310	17,821	11,079	10,954
Indoor	515	3,314	3,860	3,929
Death	63	41	77	73
Early Infancy Diseases				
Outdoor	716	394	537	868
Indoor	5	170	254	121
Death	4	101	110	53

PATIENTS TREATED IN HOSPITALS OF HOOGHLY DISTRICT AND DEATHS FROM SPECIFIC CAUSES: 1961-1964.—*concld.*

Name of Disease	1961	1962	1963	1964
Senility etc.				
Outdoor	4,628	—	704	29
Indoor	4	14	11	16
Death	2	4	3	4
Effects of Poisons				
Outdoor	911	1,104	814	648
Indoor	172	1,088	1,140	1,289
Death	38	63	55	73

In an organized medical system the number of patients treated for diagnosed causes reveals the incidence of those causes more correctly than mortality figures. Accordingly, the preceding table establishes that traditional diseases like cholera, smallpox and malaria, although still prevalent in the district, are under control except for sporadic epidemics. Dysentery continues to be one of the major diseases and maladies of the T.B. and neoplasm groups as also nutritional diseases including anaemias are on the increase.

Malaria

The present incidence of this one-time dreaded disease is much more on the rural areas of the district than on the urban as would be evident from the following mortality table.[44]

DEATH FROM MALARIA IN RURAL AND URBAN AREAS OF HOOGHLY DISTRICT

	1961	1962	1963	1964
Rural	73	41	21	71
Urban	5	4	5	1

From available statistics it appears that the annual malarial cycle reaches its ebb around the month of May and then grows in incidence reaching its peak towards November.

In 1952-53, 16 malaria control units under the National Malaria Control Programme started functioning in West Bengal with a plan for indoor and outdoor spraying of insecticides and distribution of control drugs. Of these one was stationed in Hooghly district covering 1,154.5 sq. miles inhabited by 11.77 lakhs of people. The programme was renamed Malaria Eradication Programme in 1958-59 and from 1963-64 it entered into what is known as the 'consolidation phase'. For assessing the results of this scheme, epidemiological indices, such as spleen and parasite rates, were collected every year during the non-spraying seasons. The cumulative spleen-rates (in percentages) in the district were 22.9 in 1952, 18.0 in 1953, 7.5 in 1954 and 4.6 in

1955[45] signifying a uniform decrease in these rates from 1952 when D.D.T. spraying was started in this district. The consolidated blood survey reports for calculating parasite rates show that while in 1952 it was 4.9, it decreased to 1.2 in 1953, 0.8 in 1954 and 0.0 in 1955.

The malaria control unit in the district was under a medical officer assisted by 3 supervisors and 12 inspectors. Besides, field workers were appointed from time to time. Of the non-official organizations which helped the anti-malaria campaign, the Serampore municipality was specially commended, among others.

An intensive scheme was taken up in 1952 by the Rural Health Training Centre at Singur over an area of 32.98 sq. miles covering 68 villages and a population of 73,413. Indoor residuary D.D.T. spraying of all houses, curative treatment of cases with anti-malarial drugs and prophylactic use of Paludrine resulted in the drop in spleen-rate from 0.5% in 55 villages, 6.1% in 8 villages and 11.2% in 1 village in 1950 to 1.5% in 37 villages within 1952 while the remaining villages became free from it altogether. The overall results achieved under the Malaria Eradication Programme have been so encouraging that in 1963 the Health Directorate, West Bengal, omitted for the first time malaria from a list of 6 leading causes of deatns in West Bengal. In fact, this dreaded scourge of the past is now only a marginal ailment.

Cholera

The urban strip of the district along the Bhagirathi lies in the endemic belt of cholera running north from Calcutta. This industrial belt is characterized by poor environmental sanitation. The disease is generally endemic throughout the year reaching two peaks, in April (the major one) and July. Its urban character will be evident from the following table[46]:

DEATH FROM CHOLERA IN HOOGHLY DISTRICT: 1961-64

	1961	1962	1963	1964
Urban	139	70	162	85
Rural	26	20	102	6

Commenting on the conditions obtaining at the turn of the century, Crawford had observed that the hard core of the disease was to be found among industrial labour residing in the slum areas.

Prior to 1958 anti-cholera drives were left to the local self-governing bodies, the Government supplying inoculation vaccines free of cost and running mobile medical units of their own. In 1953 Hooghly was bracketed with Howrah and Calcutta in having the maximum incidence of cholera and of the total 35,31,233 anti-cholera inocula-tions performed during the year in West Bengal, it accounted for 2,54,116. In the same year temporary regulations for prevention of cholera under the Indian Epidemic Diseases Act of 1897 were enforced in the district when the State Government gave financial aid to

municipalities for improving their drinking water supply and sewerage schemes and to the Civil Surgeons and the Executive Engineers of the Public Health Engineering Directorate for sinking and re-sinking tube-wells in the rural areas.

Smallpox

This virus borne disease prevails all over the district with an approximate periodicity of 3 to 5 years for visitations in epidemic form. The following table[47] giving mortality figures for two decades 66 years apart indicates the variation of the incidence of smallpox in the district as also its cyclical nature.

DEATH FROM SMALLPOX IN HOOGHLY DISTRICT: 1889-98 AND 1955-64

1889-98		1955-64	
Year	Death	Year	Death
1889	30	1955	13
1890	158	1956	89
1891	49	1957	685
1892	35	1958	498
1893	9	1959	85
1894	63	1960	16
1895	400	1961	7
1896	81	1962	14
1897	234	1963	758
1898	60	1964	64

The rural-urban break-up of the death figures[48] for the period from 1961 to 1964 was as below:

	1961	1962	1963	1964
Rural	4	9	475	38
Urban	3	5	283	26

It is apparent that in normal times smallpox is evenly distributed between the towns and the villages but during its periodic outbursts the impact is perceptibly more on the rural areas. The reasons may, possibly, be found in comparative lack of preventive measures and dearth of pure drinking water supply in the countryside.

Smallpox came to be recorded as an endemic disease in Hooghly district in 1865 when Hooghly town had a smallpox epidemic with a death-rate of 0.37 per thousand. The next epidemic occurred in 1895 when the three towns of Bansberia, Bhadreswar and Hooghly suffered most. Even as late as in December, 1966, the State Government promulgated regulations for control of smallpox under the Epidemic Diseases Act in all the 11 municipal areas of the district.[49]

It appears from several reports prepared by the Directorate of Health Services, West Bengal that more than 30% mortality from this disease occurs in the age-group of 0-10 years. The peak incidence of smallpox occurring around March each year has remained unaltered for more than six decades now. As an epidemic control measure, the State Government maintains 140 relief camps throughout West Bengal of which 17 are in Hooghly district. Besides vaccinating people against smallpox, these units also undertake prophylactic measures against other epidemic diseases.

Vaccination

Smallpox vaccination appears to have been introduced in Hooghly district in 1869. In 1880-81 the vaccination department was placed under a Sanitary Commissioner and the Compulsory Vaccination Act of 1880 was extended to the Hooghly-Chinsura municipal area in July 1881 to be extended to Serampore in 1882-83 and to Bansberia, Bhadreswar, Baidyabati, Kotrung and Uttarpara in 1883-84. In 1892-93 vaccination work was transferred from the Sanitary Commissioner to the Civil Surgeon and since then it had remained under the dual control of the District Board and the municipalities on the one hand and the Health Department of the State Government on the other. From 1958 the primary responsibility in this behalf was withdrawn from the local bodies and placed under the Chief Medical Officer of Health. The following table[60] will indicate the number of vaccinations done in the district since this change-over.

SMALLPOX VACCINATIONS IN HOOGHLY DISTRICT· 1959-64

Year	No. of vaccinations
1959	3,04,865
1960	5,29,830
1961	2,91,195
1962	6,53,219
1963	7,42,134
1964	4,43,580

The vaccination programme was further extended into the rural areas from October 1962 covering a population of approximately 14.5 lakhs An 'eradication unit' worked from November 1962 to October 1963 and the target date for a hundred per cent vaccination in the district was set at March 31, 1966.

Tuberculoses

Tuberculoses of several kinds which are compartively new in the public health scene of the district have now assumed grave proportions. The Chief Medical Officer of Health, Hooghly ascribes their origin to 'factors of rapid industrialization, congestion, undernutrition, excess of labour, lack of hygienic accommodation, etc.' The continued influx of displaced persons from East Pakistan since

1947 appears to have aggravated the situation. The C.M.O.H. states that the precise incidence of the disease is yet to be assessed but it seems to correspond with the countrywide incidence rate of 15 to 30 per thousand of which 25 per cent are positive subjects. The following table[51] shows the urban-rural distribution of the disease in the district according to its various categories.

DEATHS FROM TUBERCULOSES IN HOOGHLY DISTRICT : 1961-64

		1961	1962	1963	1964
Pulmonary T.B. without mention of occupational diseases of lung	Urban	40	17	21	15
	Rural	88	87	84	60
T.B. of respiratory system other than pulmonary without mention of occupational diseases of lung	Urban	116	124	111	111
	Rural	134	162	178	148
T.B. of meninges and central nervous system	Urban	294	3	—	2
	Rural	9	1	—	—
T.B. of bones and joints, active or unspecified	Urban	26	—	1	1
	Rural	11	4	1	8
T.B. of other forms	Urban	13	1	—	2
	Rural	1	—	—	—

The foregoing figures prove that more people died of tuberculoses in the rural and not in the urban areas of the district during the four years under review. This may not, however, be sufficient to establish that the virulence of the disease is less in the urban localities. The Hooghly countryside covers a much larger area than that is contained in the 11 municipal towns and this accounts for a huge difference in the respective populations which is sure to tip the scales in favour of the villages. Besides, the State Health Directorate admits that "the recorded figure of tuberculosis mortality cannot be regarded by any means as giving an actual idea of prevalence of this disease because many cases are not properly diagnosed and many deaths from this disease are not properly registered."[52]

There are altogether 197 beds in the different hospitals of the district especially reserved for the tubercular patients. In the rural areas the Health Centres arrange for only domiciliary treatment. There are 23 chest clinics in West Bengal under the Bengal T.B. Association of which one is located at Serampore. The State Government supplies anti-biotics free of cost to all indigent indoor patients in the T.B. hospitals and to other deserving T.B. patients from the outdoor sections of hospitals and during domiciliary treatment. In

1946 a mass B.C.G. immunization scheme was launched in the district in collaboration with the W.H.O. when a mobile team toured the district and inoculated susceptible individuals. Mass miniature radiography was also undertaken in some of the concen tration areas.

Enteric diseases: diarrhoea, dysentery etc.

It appears that enteric diseases were fairly widespread in the district during the 18th[53] and the 19th[54] centuries. In his recent report the Chief Medical Officer of Health, Hooghly states that "the mortality rate in respect of these diseases is still high. Excepting deaths from fever, these diseases take a heavy toll of life every year. With the rains the intensity of these diseases increases and continues till the month of January."

The rural-urban incidence of these diseases in the district is given in the following table:[55]

DEATH FROM DYSENTERY IN ALL FORMS IN HOOGHLY DISTRICT, 1961-64

	1961	1962	1963	1964
Urban	190	263	253	206
Rural	281	376	341	291

It would appear that the incidence is evenly distributed between the urban and rural areas, the latter having a slight edge over the former. Discussing the death-rates from enteric diseases the Annual Report on the Health of the Population of West Bengal, 1949 (p. 7) published by the Directorate of Health Services stated: "Compared with the quinquennial average from 1938-42, the mortality rate was . . . low in seven districts, namely Burdwan, Birbhum, Bankura, Hooghly, Howrah, West Dinajpur and Darjeeling."

Eye diseases

"Incidence of eye diseases," reports the Chief Medical Officer of Health, Hooghly, "is rather high in the district. The cases are varied without special endemicity of any one of the ailments. This increased morbidity is thought to be due to the factors of rapid industrialization, poor hygienic conditions, malnutrition and ignorance of proper personal hygiene." In the following table[56] giving statistics of people treated and deaths from eye diseases, the former figures are much more relevant for measuring the incidence of these maladies as mortality from eye diseases is very low.

INCIDENCE OF EYE DISEASES IN HOOGHLY DISTRICT: 1961-64

		1961	1962	1963	1964
Inflammatory diseases of eye	Outdoor treatment	16,938	21,256	9,274	13.789
	Indoor treatment	16	71	77	35
	Death	—	1	—	1

INCIDENCE OF EYE DISEASES IN HOOGHLY DISTRICT: 1961-64.—*contd.*

		1961	1962	1963	1964
Cataract	Outdoor treatment	7,852	6,779	5,815	6,379
	Indoor treatment	163	944	1,017	1,213
	Death	—	—	—	2
Glaucoma	Outdoor treatment	534	1,177	1,264	1,218
	Indoor treatment	9	73	69	84
	Death	—	—	—	—
Other diseases of eye	Outdoor treatment	18,492	23,999	24,158	27.934
	Indoor treatment	34	152	158	150
	Death	—	—	—	—

The table proves an increasing incidence of eye diseases. There are 37 beds in different hospitals of the district earmarked for patients suffering from eye diseases, besides the usual outdoor hospital facilities.

HOSPITALS AND DISPENSARIES

Public hospitals

The following table, compiled from several official reports, gives the names and locations of various health institutions in the district and the number of patients treated and the annual death-rates in each of them for the years 1962, 1963, 1964 and 1965. The figures will elucidate the extent of hospital facilities available in the district as also the performance of the medical institutions in bringing those within the reach of the suffering public.

PERFORMANCE OF HOSPITALS IN HOOGHLY DISTRICT : 1962-65

Name of Institution*	1962		1963		1964		1965	
	No. of patients treated	Annual death-rate (%)	No. of patients treated	Annual death-rate (%)	No. of patients treated	Annual death-rate (%)	No. of patients treated	Annual death-rate (%)
1	2	3	4	5	6	7	8	9
Sadar Subdivision								
Imambara Sadar Hospital	11,776	4.0	13,009	3.9	Not available		Not available	
Bansberia R.C. Hospital	119	2.5	118	0.8	100	1.0	58	1.7
Hooghly Sadar A.G. Hospital	714	14.8	866	20.5	801	20.2	599	22.5

*R.C. denotes Relief Camp; A.G. Auxiliary General; P.H.C. Primary Health Centre; S.H.C. Subsidiary Health Centre; U.H.C. Union Health Centre; and S.D. Subdivisional Hospital.

PERFORMANCE OF HOSPITALS IN HOOGHLY DISTRICT : 1962-65.—*contd.*

Name of Institution	1962		1963		1964		1965	
	No. of patients treated	Annual death-rate (%)	No. of patients treated	Annual death-rate (%)	No. of patients treated	Annual death-rate (%)	No. of patients treated	Annual death-rate (%)
1	2	3	4	5	6	7	8	9
Sadar Subdivision.—*contd.*								
Dwarbasini A.G. Hospital	140	2.5	136	1.08	160	3.1	157	2.5
Balagarh A.G. Hospital	259	0.8	264	Nil	256	2.3	271	2.5
Magra P H.C.	1,796	3.3	2,008	2.8	1,588	3.0	1,551	3.6
Makalpur P.H.C.	444	2.2	480	1.5	438	1.3	498	3.0
Pandua P.H.C.	1,656	3.0	1,614	3.0	1,572	2.0	1,583	2.6
Boinchi S.H.C.	738	0.9	956	1.02	795	1.1	Not available	
Haraldaspur S.H.C.	201	2.5	359	1.03	151	4.0	144	3.5
Itachuna S.H.C.	297	1.3	328	0.6	287	1.0	320	0.3
Rameswarpur Gopalnagar S.H.C.	408	0.08	507	0.9	Not available		Not available	
Palashee S.H.C.	377	0.8	459	1.7	424	0.7	374	0.8
Khejurdaha Milki S.H.C.	341	2.0	410	2.0	383	2.7	319	0.4
Bagnan Chaitanyabati S.H.C.	309	1.6	330	3.1	368	1.3	365	1.9
Bhanderhati S.H.C.	320	5.3	352	0.8	360	1.4	Not available	
Dhaniakhali P.H.C.	859	3.7	351	2.1	1,010	2.1	1,818	2.3
Guptipara S.H.C.	302	0.3	363	0.5	589	0.7	499	1.8
Dumurdaha-Nityanandapur S.H.C.	293	1.0	268	1.5	268	1 1	235	1.2
Bakulia P.H.C.	352	2.5	374	1 6	443	Nil	483	0.8
Daurpur S.H.C.				No indoor				
Sugandha S.H.C.				-do-				
Chopa S.H.C.	435	0.7	363	Nil	544	Nil	331	0.3
Mahipalpur S.H.C.				No indoor				
Sukharia S.H.C.				-do-				
Serampore Subdivision								
Uttarpara Govt. Hospital	Not in existence		1,161	2.8	2,442	2.8	2,575	2.7
Annexe to above	793	6.6	1,024	7 8	1,545	4.7	6,342	1.3
Walsh Hospital, Serampore	7,561	3.2	7,198	4.0	8,516	3.6	Not available	
Uttarpara R.C. Dispensary				No indoor				

PERFORMANCE OF HOSPITALS IN HOOGHLY DISTRICT : 1962-65. *contd.*

Name of Institution	1962		1963		1964		1965	
	No. of patients treated	Annual death-rate (%)	No. of patients treated	Annual death-rate (%)	No. of patients treated	Annual death-rate (%)	No. of patients treated	Annual death-rate (%)
1	2	3	4	5	6	7	8	9
Serampore Subdivision.—*contd.*								
Bhadrakali R.C. Hospital	357	0.8	222	1.0	190	0.5	Not available	
Bhattapur S.H.C.	385	1.3	377	1.0	456	Nil	333	1.03
Jangipara P.H.C.	1,083	1.6	1,230	2.0	1,199	2	1,027	3.0
S.C.C.								
P.H.C.	657	0.7	903	0.4	941	0.3	999	Nil
Mundalika S.H.C.	444	0.9	416	1.9	396	Nil	396	Nil
Furfura S.H.C.	63	1.6	25	Nil	27	Nil	26	4.0
Aniya P.H.C.	380	Nil	445	0.2	515	0.4	422	0.3
Guti S.H.C.				No indoor				
Begampur S.H.C.				-do-				
Chandernagore Subdivision								
Margain Hospital, Chandernagore	9,063	2.0	7,763	2.0	12,305	4.3	11,441	4.8
Balarambati S.H.C.	322	1.6	348	Nil	316	0.3	318	0 6
Bora S.H.C.	615	0.1	637	0.9	556	0.9	510	0.4
Bajemelia S.H.C.	363	0.3	399	0.2	406	...	376	0.6
Bandipur S.H.C.	679	1.3	615	0.8	618	0.9	610	0.3
Tarakeswar P.H.C.	952	4.4	1,115	4.5	1,082	4.6	1,014	3.4
Haripal P.H.C.	592	3.4	852	2.2	628	3.3	816	3.0
Singur P.H.C.	1,680	2.0	1,587	3.3	1,095	6.0	Not available	
Nasibpur S.H C.	Not available		637	0.3	509	0.2	198	Nil
Anandanagar S.H.C.				No indoor				
K. R. Dey Chest Clinic				-do-				
Arambagh Subdivision								
Arambagh S.D. Hospital	1,956	3.0	3,328	3.9	3,570	5.0	3,982	3.3
Pursura A.G. Hospital	48	2.0	48	Nil	10	Nil	51	4.0
Badanganj A.G. Hospital	294	3.4	171	2.9	136	2.1	1,506	0.4
Goghat A.G. Hospital	130	1.5	131	Nil	186	1.0	193	Nil

PERFORMANCE OF HOSPITALS IN HOOGHLY DISTRICT: 1962-65.—*concld.*

Name of Institution	1962		1963		1964		1965	
	No. of patients treated	Annual death-rate (%)	No. of patients treated	Annual death-rate (%)	No. of patients treated	Annual death-rate (%)	No. of patients treated	Annual death-rate (%)
1	2	3	4	5	6	7	8	9
Arambagh Subdivision.—*contd*								
Malaypur S.H.C.	523	2.0	543	2.0	603	1.1	589	1.5
Rangtakhaha S.H.C.	221	5.0	309	0.6	236	Nil	217	Nil
Khanakul P.H.C.	689	3.2	821	3.0	734	4.0	Not available	
Tantisal S.H.C.	356	0.7	394	4 9	430	2.8	412	3.0
Sabalsingpur S.H.C.				No indoor				
Salibpur S.H.C.	296	Nil	326	0.9	293	1.0	276	0.4
Muthadanga S.H.C.				No indoor				
Special Govt. Hospitals								
Chinsura Jail Hospital	721	0.3	964	Nil	1,367	0 08	1,244	10.08
Chinsura Police Hospital	938	Nil	1,017	0.1	1,124	Nil	1,242	0.08

While death-rates at different hospitals have varied for reasons which are not apparent, the overall fact remains that hospitals and health centres in the district are becoming more and more popular among the people they serve although the latest figures relating to some of them were not available.

The extension of medical facilities in the district, phased according to the Five Year Plans, are depicted in the following table.[57]

INSTITUTIONAL MEDICAL FACILITIES AVAILABLE IN HOOGHLY DISTRICT: 1947-64

Period	No. of medical institutions	No. of beds	Population served per bed
In 1947	70	559	2,251
At the end of First Five Year Plan (as on 31.3.56)	81	693	2,695
At the end of Second Five Year Plan (as on 31.3.61)	110	958	2,397
During Third Five Year Plan (as on 31.12.64)	134	1,614	1,512

These figures do not include police, jail and railway hospitals as also those attached to mills and factories but include the hospitals maintained by local bodies. A study of the public medical institutions

reveals that in the Sadar subdivision there are 25 such units with a total of 462 beds, in Serampore subdivision 12 with 181 beds, in Chandernagore subdivision 11 with 247 beds and in Arambagh subdivision 11 with 164 beds. These are all Class I health institutions as defined by the Directorate of Health Services, West Bengal. In addition, there are two Class II Special State Hospitals, viz. the Chinsura Police Hospital with 98 beds and the Chinsura Jail Hospital with 27 beds. The Central Government runs three hospitals (Class IV) at Kodalia-Debanandapur, Bandel and Balarambati. The first two contain 5 beds each while the third is run only with an outdoor wing.

The list below[58] gives available information regarding hospitals and dispensaries in the district run by the State Government and the local bodies. The institutions under the latter are mostly dispensaries which normally do not provide for indoor treatment.

GOVERNMENT HOSPITALS AND HEALTH CENTRES IN HOOGHLY DISTRICT: 1965-66

Name of Institution*	Police Station	Anchal/Town	No. of Beds
Sadar Subdivision			
Imambara Hospital	Chinsura	Chinsura	200
Bansberia R. C. Hospital	Magra	Bansberia	10
Hooghly A. G. Hospital	Chinsura	Chinsura	40
Dwarbasini A. G. Hospital	Polba	Dwarbasini	15
Balagarh A. G. Hospital	Balagarh	Sripur-Balagarh	15
Magra P.H.C.	Magra	Magra	20
Makalpur P.H.C.	Dadpur	Makalpur	10
Pandua P.H.C.	Pandua	Pandua	20
Bainchi S.H.C.	,,	Bainchi	10
Haral-Daspur S.H.C.	,,	Haral-Daspur	4
Itachuna S.H.C.	,,	Khanyan	10
Rameswarpur Gopalnagar S.H.C.	,,	Chandpur	10
Palashee S.H.C.	Dhaniakhali	Gurap	10
Khejurdaha Milki S.H.C.	,,	Bhastara	10
Bagnan S.H.C.	,,	Belmuri	10
Bhandarhati S.H.C.	,,	Bhandarhati	10
Dhaniakhali P.H.C.	,,	Somaspur	20

*R. C. Hospital means a Relief Camp Hospital and A. G. Hospital means an Auxiliary Government Hospital. P.H.C.s are Primary Health Centres. S.H.C.s are Subsidiary Health Centres and U.H.C.s are Union Health Centres.

GOVERNMENT HOSPITALS AND HEALTH CENTRES IN HOOGHLY DISTRICT: 1965-66.
—*contd.*

Name of Institution	Police Station	Anchal/Town	No. of Beds
Sadar Subdivision.—*contd.*			
Guptipara S.H.C.	Balagarh	Guptipara	6
Nityanandapur S.H.C.	,,	Nityanandapur	10
Bakulia P.H.C.	,,	Bakulia	10
Danrpur S.H.C.	Dadpur	Babnan	—
Sugandha S.H.C.	Polba	Sugandha	—
Chopa S.H.C.	Dhaniakhali	Gurbari	—
Mahipalpur S.H.C.	Balagarh	Mahipalpur	—
Sukharia S.H.C.	,,	Somra	2
Chandernagore Subdivision			
Chandernagore Hospital	Chandernagore	Chandernagore	115
Balarambati S.H.C.	Singur	Balarambati	10
Bora S.H.C.	,,	Bora	10
Bajemelia S.H.C.	,,	Singur	10
Bandipur S.H.C.	Haripal	Bandipur	10
Tarakeswar P.H.C.	Tarakeswar	Tarakeswar	20
Haripal P.H.C.	Haripal	Haripal	10
Singur P.H.C.	Singur	Singur	50
Nasibpur U.H.C.	,,	Nasibpur	12
Anandanagar U.H.C.	,,	Anandanagar	—
K. R. Dey Chest Clinic	,,	Singur	—
Serampore Subdivision			
Uttarpara General Hospital	Uttarpara	Uttarpara	100
Annexe to Uttarpara General Hospital	,,	,,	20
Walsh Hospital	Serampore	Serampore	76
Uttarpara R. C. Hospital (Dispensary)	Uttarpara	Uttarpara	—
Bhadrakali R. C. Hospital	Bhadrakali	Kotrung	15
Bhattapur S.H.C.	Chanditala	Sheakhala	14
Jangipara P.H.C.	Jangipara	Jangipara	20
S.C.C. P.H.C.	Chanditala	Chanditala	10
Mundalika S.H.C.	Jangipara	Beganda	10
Furfura S.H.C.	,,	Furfura	4

GOVERNMENT HOSPITALS AND HEALTH CENTRES IN HOOGHLY DISTRICT: 1965-66.
—*concld.*

Name of Institution	Police Station	Anchal/Town	No. of Beds
Serampore Subdivison.—*contd.*			
Aniya P.H.C.	Chanditala	Akuni	10
Guti S.H.C.	Jangipara	Guti	2
Begampur S H.C.	Chanditala	Begampur	...
Arambagh Subdivision			
Arambagh Subdivisional hospital	Arambagh	Arambagh	72
Pursura A.G. Hospital	Pursura	Pursura	10
Badanganj A.G. Hospital	Badanganj	Badanganj	10
Goghat A.G. Hospital	Goghat	Goghat	10
Malaypur S.H.C.	Arambagh	Malaypur	10
Rangtakhali S.H.C.	"	Salehpur	10
Khanakul P.H.C.	Khanakul	Khanakul	10
Tantisal S.H.C.	"	Balipur	10
Sabalsingpur S.H.C.	"	Sabalsingpur	10
Natibpur S.H.C.	"	Natibpur	10
Muthadanga S.H.C.	Arambagh	Mayapur	2

LOCAL FUND HOSPITALS AND DISPENSARIES IN HOOGHLY DISTRICT: 1965-66

Sadar Subdivision			
Bansberia Dispensary	Magra	Bansberia Municipality	—
Gurap Zilla Parishad Dispensary	Dhaniakhali	Gurap	—
Digneswar Zilla Parishad Dispensary	Dadpur	Satithan	—
Dwarbasini Zilla Parishad Dispensary	Polba	Dwarbasini	—
Bilsora Zilla Parishad Dispensary	Pandua	Haral-Daspur	—
Mandalai Zilla Parishad Dispensary	"	Jamgram	—
Kamrul Zilla Parishad Dispensary	Dhaniakhali	Gopinathpur	—
Tentulia Zilla Parishad Dispensary	Balagarh	Sripur-Balagarh	—
Dasghara Zilla Parishad Dispensary	Dhaniakhali	Dasghara	—
Goswami-Malipara Zilla Parishad Dispensary	Dadpur	Goswami-Malipara	—

LOCAL FUND HOSPITALS AND DISPENSARIES IN HOOGHLY DISTRICT: 1965-66.
—*contd.*

Name of Institution	Police Station	Anchal/Town	No. of Beds
Sadar Subdivision.—*contd.*			
Basna Zilla Parishad Dispensary	Balagarh	Ektarpur	—
Kodalia Debanandapur Charitable Dispensary	Chinsura	Kodalia Union	—
Digsui Koera Charitable Dispensary	Magra	Digsui	—
Polba Anchal Charitable Dispensary	Polba	Polba	—
Amnan Charitable Anchal Dispensary	,,	Amnan	—
Akna Anchal Charitable Dispensary	,,	Akna	—
Hariprasanna Charitable Dispensary	Dadpur	Dadpur	—
Haral-Daspur Charitable Dispensary	Pandua	Haral-Daspur	—
Panchgara-Bhotgram Charitable Dispensary	,,	Panchgara-Bhotgram	—
Simlagarh Bhitasin Anchal Dispensary	,,	Simlagarh	—
Belun Charitable Dispensary	,,	Belun	—
Jamna Charitable Dispensary	,,	Jamna	—
Dhaniakhali Charitable Dispensary	Dhaniakhali	Dhaniakhali	—
Dumurdaha Charitable Dispensary	Balagarh	Nityanandapur	—
Mahanad Anchal Charitable Dispensary	Polba	Mahanad	—
Khejurdaha Milki Anchal Charitable Dispensary	Dhaniakhali	Bhastara	—
Chandernagore Subdivision			
Rajkissen Charitable Dispensary	Bhadreswar	Bhadreswar	—
Khalisani Zilla Parishad Dispensary	,,	Bighati-Khalisani	—
Champadanga Zilla Parishad Dispensary	Tarakeswar	Champadanga	—
Jejur Zilla Parishad Dispensary	Haripal	Jejur	—
Ramnatitola Zilla Parishad Dispensary	,,	—	—

LOCAL FUND HOSPITALS AND DISPENSARIES IN HOOGHLY DISTRICT: 1965-66.
—contd.

Name of Institution	Police Station	Anchal/Town	No. of Beds
Chandernagore Subdivision—*contd.*			
Champdani Charitable Dispensary	Bhadreswar	Champdani	6
Nalikul Anchal Charitable Dispensary	Haripal	Nalikul	—
Talpur Charitable Dispensary	Tarakeswar	Talpur	—
Ellipur Charitable Dispensary	Haripal	Ellipur	—
Serampore Subdivision			
Mahesh Charitable Dispensary	Serampore	Serampore	—
Baidyabati Charitable Dispensary	,,	Baidyabati	—
Baidyabati Maternity & Child Welfare Centre	,,	,,	44
Pitambar Charitable Dispensary	Uttarpara	Konnagar	—
Bhandaihati Charitable Dispensary	Jangipara	Dilakash	—
Konnagar Maternity & Child Welfare Centre	Uttarpara	Konnagar	--
Kumirmora Zilla Parishad Dispensary	Chanditala	Janai	—
K.M. Saha Charitable Dispensary	Serampore	Serampore	--
Begampur Anchal Dispensary	Chanditala	Begampur	—
Nawabpur Kumirmora Dispensary	,,	Janai	—
Sheakhala Charitable Dispensary	,,	Sheakhala	—
Rajbalhat Charitable Dispensary	Jangipara	Rajbalhat	—
Arambagh Subdivision			
Badanganj Zilla Parishad Dispensary	Badanganj	Badanganj	—
Gaurhati Anchal Dispensary	Arambagh	Gaurhati	—
Tirol Anchal Dispensary	,,	Tirol	--
Batanal Charitable Dispensary	,,	Batanal	—
Arandi Charitable Dispensary	,,	Arandi	—
Chilladangi Charitable Dispensary	Pursura	Chilladangi	—
Goghat Anchal Dispensary	Goghat	Goghat	—
Saora Anchal Dispensary	,,	Saora	—
Raghubati Anchal Dispensary	,,	Raghubati	—
Nakunda Charitable Dispensary	,,	Nakunda	—

LOCAL FUND HOSPITALS AND DISPENSARIES IN HOOGHLY DISTRICT: 1965-66.
—*concld.*

Name of Institution	Police Station	Anchal/Town	No. of Beds
Arambagh Subdivision.—*contd.*			
Mandaran Anchal Dispensary	Goghat	Mandaran	—
Balipur Charitable Dispensary	Khanakul	Balipur	—
Rajhati Charitable Dispensary	"	Rajhati	—
Thakuranichak Charitable Dispensary	"	Thakuranichak	—
Bali Anchal Charitable Dispensary	"	Bali	—
Harinkhola Charitable Dispensary	Arambagh	Harinkhola	—
Ramchandra Charitable Dispensary	Khanakul	Balipur	—

Private hospitals and nursing homes

There are thirteen private hospitals in the district, six of which are aided by Government. Nursing homes, which have come into vogue only recently, number six. Following is a list[59] of the private aided hospitals showing their locations and respective bed capacities.

Name of Institution	Police Station	Anchal/Town	No. of Beds
King George Silver Jubilee Maternity & Child Welfare Centre	Chinsura	Chinsura	22
Mandra Unnayan Samsad	Dhaniakhali	Mandra	—
Gauthati T.B. Hospital	Bhadreswar	Champdani	65
B.B.D. Chest Clinic-cum-T.B. Hospital	Serampore	Serampore	38
Janai Maternity & Child Welfare Centre	Chanditala	Janai	—
Bishnu Chandra Dispensary and Maternity & Child Welfare Centre	Jangipara	Furfura	—

The list[60] below gives details of private unaided hospitals and dispensaries in the district.

Name of Institution	Police Station	Anchal/Town	No. of Beds
Tribeni K.K. Charitable Dispensary	Bansberia	Magra	—
Asutosh Smriti Mandir	Balagarh	Somra	—
Nabagram Co-operative Dispensary	Uttarpara	Makhla	—

Name of Institution	Police Station	Anchal/Town	No. of Beds
Rampara B.L. Trust Fund Charitable Dispensary	Jangipara	Furfura	—
Rishra Seva Sadan	Serampore	Rishra	26
Mankundu Mental Hospital	Mankundu	Mankundu	120
Tarakeswar Hospital	Tarakeswar	Tarakeswar	11

The six Nursing Homes[61] are: Central Clinic and Serampore Clinic at Serampore, Republic Nursing Home at Rishra, Hooghly Nursing Home at Chinsura, Dasgupta Clinic at Bandel and Maternity Home at Chandernagore.

Taking all this into account the district has 3 State hospitals located at Chinsura, Serampore and Uttarpara with an annexe attached to the last-named one, 3 R.C. hospitals, 6 A.G. hospitals, 2 Subdivisional hospitals, 12 Primary Health Centres, 30 Subsidiary Health Centres and 2 Union Health Centres. A total number of 1,614 beds are available in these institutions of which 137 are in cabins, 191 in paying wards and the remaining 1,286 are free beds. Of these, again, 184 are medical beds, 138 surgical beds, 196 beds are reserved for tubercular patients, 176 for maternity and gynaecological cases, 120 for mental cases, 57 for cholera, 46 for smallpox, 37 for eye diseases, 8 for diptheria, 4 for venereal diseases and 4 for ear, nose and throat cases. The remaining 643 beds are 'open'.

The Bhore Committee had recommended for Primary Health Centres with 75 beds each for every 20,000 people, but paucity of funds and of trained personnel prompted it to recommend the setting up of Primary Health Centres with only 2 beds for maternity and 2 for emergency cases for every 40,000 people. In partial modification of the recommendation, therefore, the Government of West Bengal started establishing rural hospitals, known as Health Centres, since 1948. The idea was to have at least one Health Centre in every Union (which had approximately the same area now covered by an Anchal Panchayat) having 4 to 10 indoor beds. The Union Health Centres within each police station were to be affiliated to the Thana Health Centres having a minimum of 20 and an optimum of 50 beds. All Health Centres in a sub-division were, again, to be affiliated to the Sub-divisional Hospitals having 68 indoor beds each. The conditions for the establishment of a Union Health Centre were that the local people should donate 6 bighas of land and an amount of cash while for a Thana Health Centre 20 bighas of land plus a cash amount. This scheme continued till 1955 when, at the instance of the Government of India, it was decided to have Primary Health Centres with 10 beds at the headquarters of every Community Development Block

along with 2 or 3 Subsidiary Health Centres at suitable places within each block area. The Subsidiary Health Centres were to be in the nature of dispensaries with only 2 non-dieted emergency beds. The district now contains all these types of institutions set up from time to time. The Sadar subdivision has 5 Primary and 15 Subsidiary Health Centres, the Serampore subdivision 3 Primary and 5 Subsidiary Health Centres, the Chandernagore subdivision 3 Primary, 4 Subsidiary and 2 Union Health Centres and the Arambagh subdivision 1 Primary and 6 Subsidiary Health Centres.

Medical administration

The Chief Medical Officer of Health is in overall charge of medical and public health administration of the district. On the medical side he is assisted by a District Medical Officer, a Resident Medical Officer attached to the Sadar Hospital, a Subdivisional Medical Officer looking after each of the Subdivisional Hospitals, and Medical Officers in charge of Auxiliary Government and Relief Camp Hospitals as also Health Centres and Special Hospitals. An assistant C M.O.H. supervises issue of drug licences and family planning and a Staff Officer attends to civil defence matters. On the public health side the C.M.O.H. has the assistance of the District Health Officer and the Subdivisional Health Officers besides others appointed to discharge specific duties like the Medical Officer for School Health, the Assistant District Health Officer for the National Malaria Eradication Programme, the District Family Planning Officer for family planning, the Medical Officer for B.C.G. campaign and such others. The subdivisions are, again, divided into Public Health Circles supervised by Sanitary Inspectors while the Mobile Units are looked after by Medical Officers.

On the institutional side the district health administration has the District Hospital (Imambara Hospital) at the top having several wings like medical care, laboratory service, maternity and child welfare services, family planning, departments for eye, ear, nose, throat, tuberculosis, dental and venereal diseases, the Blood Bank, the X-ray unit and a cell for implementing the School Health Programme. The Auxiliary Government and Relief Camp Hospitals are functionally restricted to medical care alone while the Public Health services are entrusted with the collection and maintenance of vital statistics, improvement of environmental sanitation and immunization through vaccination, inoculation, health education and testing of food articles. The functions of the Health Centres are both preventive and curative. On the preventive side, they collect and maintain vital statistics, execute various nutrition and school health programmes and undertake immunization, maternity and child welfare, family planning, health education and improvement of environmental sanitation.

The results of all the aforesaid health measures are reflected in the hospital statistics of the district which show that in an average year

39.4 per cent of the patients treated are fresh cases with new ailments, each hospital bed serves for 37.3 persons, 9.4 per cent of the patients are surgically operated upon, 3.9 per cent are X-rayed, 14 per cent undergo clinical examination, 26.6 per cent are given blood transfusion while the mortality rate is as low as 3.4 per cent.

Medical profession

In December, 1965 the Government and private hospitals in the district employed (according to C.M.O.H., Hooghly) 199 Medical Officers of whom 81 were graduates. Nurses numbered 261 of whom 129 were trained. There were besides 17 lady health visitors (including public health nurses), 80 technical staff, 14 midwives, 145 compounders, 1 sanitary inspector, 2 vaccinators and 58 health assistants. There was one doctor, one nurse and one compounder for every 8.0, 6.2 and 12.5 hospital beds respectively. The specialists attached to State hospitals were 2 physicians, 2 surgeons, 5 opthalmologists, 4 gynaecologists, 2 E.N. T. specialists, 3 dentists, 4 T.B. specialists. 4 radiologists and 3 pathologists. The number of private medical practitioners in the district, classified according to the system of medicine practised by them, is shown in the following table:[62]

	Allopathy	Homoeopathy	Kaviraji	Unani
Urban	136	56	19	9
Rural	234	218	14	9

SOME SELECTED MEDICAL INSTITUTIONS

Imambara Hospital, Hooghly

The Hooghly Imambara Hospital derives its name from the fact that it originally formed a part of the Hooghly Imambara created out of the Trust Fund left by Haji Muhammad Mohsin. "The Imambara Hospital owes its existence to the energy, humanity, and public spirit of Dr. Thomas Wise, the first Civil Surgeon of Hooghly, and to the charity of Muhammad Mohsin. It was first established as an experimental measure in August 1836. . . . For a series of years the sick inmates of the Imambara had received free medical advice, attendance, and medicines at a yearly cost of Rs. 2,280, but nothing had been done for the sick poor in the town and neighbourhood."[63] In 1894 the hospital came to occupy its present site.[64]

Dr. Wise's first annual report on the hospital for 1837 stated that it treated in that year 5,024 cases of whom 3,413 were cured, 1,539 were relieved, 33 died and 39 stayed on in the hospital for the next year. In 1839 Dr. Wise was succeeded by Dr. James Esdaile, an enthusiast in medical mesmerism. Dr. Badan Chander Chaudhuri, who was appointed the first Sub-Assistant Surgeon of the Imambara Hospital in February 1842, gave an account of the mesmeric experiments of Dr. Esdaile from which it appears that between 1839 and 1846, 73 operations under what was called 'painless surgical methods' were performed in the Imambara Hospital. Since its inception the hospital had two fairly distinct departments for 'English treatment' and 'Musalman treatment'.[65] The latter was fairly popular

among the Muslims of Chinsura and, according to Dr. Crawford, the dispensary was well-stocked with medicines of the *Unani* system.

In times of epidemic and famine the hospital has undertaken medical operations in the affected areas. In July 1866, it opened two field stations, one at Hooghly and the other at Chinsura which functioned up to December of that year. Between 1872 and 1878 training in midwifery was imparted to women of the *dhai* class but this arrangement was later discontinued. It was subsequently revived on a modern scientific basis and at present an 'Auxiliary Nursing-cum-Midwifery Training Centre' is running in the Hospital.

Walsh Hospital, Serampore

The Walsh Hospital at Serampore was established in 1836 through the efforts of Dr. Marshman who was in charge of it till 1870 when he was transferred elsewhere. Its name is derived from that of a former Commissioner of the Burdwan division. Previously, it used to be maintained partly from municipal funds, partly from subscriptions and partly from miscellaneous receipts. An outdoor patients' block was erected in 1906 at a cost of Rs. 11,000 donated by Shri Nandalal Gossain and his brothers, all residents of Serampore. The hospital was later re-built from public subscriptions supplemented by Government grants. The old Hooghly District Gazetteer, published in 1912, described it as containing "34 beds for male and 8 beds for female. The number of out-door patients is the largest in the district, averaging 47.64 daily in 1907, while the daily average of indoor patients was 21.69."[66] The hospital has now 76 beds and treats on an average 8,516 patients a year.

The Mental Hospital, Mankundu

The mental hospital now located at Mankundu was originally started with only 5 beds at 140 Balaram Dey Street, Calcutta, by The Mental Society on June 30, 1933 with Sir Manmatha Nath Mukherjee as its founder-president and Dr. Haranath Basu as its founder-secretary. It received a large grant of land and buildings at Mankundu from a prominent Calcutta industrialist and shifted to its present site in 1939. The female block of the hospital, however, continued to function in Calcutta till October 1948. In November 1942, the Government of Bengal recognized the institution and granted a licence which expired in 1944 due to its poor financial condition. Even so, the organization did its best to serve its chosen cause as would be evident from the following table.[67]

PERFORMANCE OF THE MANKUNDU MENTAL HOSPITAL: 1955-60

Year	No. of patients treated	No. of patients cured
1955-56	119	44
1956-57	143	45
1957-58	149	39
1958-59	166	52
1959-60	190	55
1960-61	181	50

In September 1963 the West Bengal Government re-issued the licence and in November 1965 a new children's block was opened for indoor treatment of children at the hospital.

At present the hospital, with 120 sanctioned beds, 60 for male and 60 for female patients, runs on the grants made by the State Government and the Calcutta Corporation supplemented by miscellaneous collections. It is equipped with modern apparatus including those required for electrotherapy and insulin shock therapy. Laboratory research is carried on at the institution in collaboration with the Indian Brain Research Association. In 1965-66 the hospital had 30 free beds, 28 concessional beds and had treated 254 cases, mostly drawn from the ranks of middle class people. A Chief Medical Officer is in direct charge of the hospital who works under the overall supervision of a Court of Governors consisting of 19 eminent persons.

Hooghly District Tuberculosis Association

Based upon a resolution of the Serampore Municipality of March 1936 and a survey of tuberculosis incidence at the place early in 1938, the Hooghly District Tuberculosis Association was formally inaugurated by Dr. B. C. Roy in December 1938. It was registered and affiliated to the Bengal Tuberculosis Association in March 1941. Initially its clinic was housed in the out-patients' ward of the Walsh Hospital, Serampore and was shifted in February 1947 to its present premises having arrangements for X-ray, pathological work, operations, dispensary and 6 observation beds. The Bhabendra Bala Devi Chest Clinic was opened in 1948 and a hospital section started functioning from July 1952. In 1956 its operation theatre was opened and the first thoracic surgery performed. The hospital at Gaurhati (Bhadreswar P.S.) was started with 50 beds in 1958. With generous grants from the State and the Central Governments a female ward at the Gaurhati Tuberculosis Hospital was opened in 1960 and it came to have 20 beds by March 1963. At present the hospital has 50 male and 20 female beds with a State Government reservation of 40 beds while another 15 beds are reserved under the Employees' State Insurance Scheme.[68]

Rural Health Unit and Training Centre, Singur

The Rural Health Unit and Training Centre, Singur[69] was started in 1939 by the All-India Institute of Hygiene and Public Health, Calcutta with assistance from the International Health Division of the Rockefeller Foundation. The land was donated by Shri A. Burman, a local landlord, and Shrimati S. N. Mullick made a cash contribution of a lakh of rupees. The Foundation financed the scheme on a sliding scale and it became a part of the State Government's responsibilities since 1944. In July 1963 a chest clinic was opened with a generous donation made by Shri Kumud Ranjan Dey. The institution was originally conceived as an experimental base of the All-India Institute of Hygiene and Public Health for conducting practical research in problems of rural public health and evolving techniques to combat them. A Primary Health Centre with a 50-bed hospital, 5 Subsidiary

Health Centres having 10 or 12 beds each, 2 Sub-Centres without beds, a hostel to accommodate 90 trainees and quarters for the staff have been built. The experiment area covers the Singur, Balarambati, Bora, Gopalnagar, Anandanagar and Nasibpur Unions within Singur police station having, according to the 1961 census, a population of 1,34,000 in 105 villages.

Amongst the manifold activities of the institution are improved registration of vital statistics, control of communicable diseases, improvement of environmental sanitation, public health laboratory services, maternity and child welfare services, school health programme, family planning, and medical relief through specialized indoor and outdoor services. Experiments in registration of vital statistics led to the useful inference that between actual and registered events in births and deaths there might be a margin of error of 59.8 per cent in births and 27.5 per cent in deaths. The research wing of the Unit has devised an improved squatting plate for rural latrines which is being popularized throughout the State. It also studied the extent of pollution of tube-well water through underground seepage and worked out a better scheme of boring for drinking water supply in rural areas. As regards family planning, in 1956 the birth-rates in the Unit's control and experimental areas were 46.0 and 45.2 per thousand which were brought down to 42.9 and 36.9 respectively in 1961. Lasting benefit from family planning can accrue only when it is integrated with a wider maternity and child health programme which is worked by the Singur Health Unit through antenatal and postnatal care through clinics, home visits, institutional and domiciliary services as also paediatric attention. It is claimed that a reduction of 75 to 50 per cent in child-birth mortality has thus been brought about within the experimental area.

The training programmes of the Centre include those in midwifery, school health and health education. The paediatric wing is a recent addition which attaches great importance to the nutritional aspects of child health. In 1958 the 4-bed maternity ward was converted into an 8-bed ward for treatment of children suffering from various nutritional diseases. Mothers were encouraged to stay with their children when they were given instructions in preparation of low cost nutritive diet from locally available foodstuff. Under the school health programme, local teachers are given a 6-week training on a practical curriculum. 189 teachers were trained up to August 1966 and employed in 29 primary schools within the experimental area. The general health education programme aims at popularizing hygienic practices through posters and pamphlets supplemented by audio-visual propaganda and home visits by the health staff. The Centre also runs a programme for turning out personnel technically qualified in public health which requires the trainees to stay at the Centre from 3 to 6 months when theoretical studies and field curricula are gone

through. In the orientation training course, which lasts from 1 to 2 months, the different methods of environmental sanitation are made familiar to the participants. A regular school named Dr. H. C. Mookherjee Health School is run by the Centre where the staff of the Unit participate in a training programme for Health Visitors. Facilities are also afforded by this school for class room instructions and field experiences to general nurses who come for orientation training in rural health for 3 months. Four classes of health personnel, viz. midwives, village volunteers, teachers and health assistants are also taught at the Centre. In addition, a continuous education programme for all types of personnel attached to the Unit itself is carried out. The institution also provides for public health laboratory services for clinical diagnoses, bacteriological investigation of latent cases, bacteriological analysis of drinking water and entomological surveys. Research in problems of microbiological interest is an additional feature. Over the years the Singur Health Unit has come to occupy a very important place in equipping medical practitioners of the country with post-graduate public health teaching not merely as an academic exercise but also as a vocational and practical training as well.

Polio Research Centre, Singur

A Polio Research Centre was started at Singur in 1964 by the Institute of Post-Graduate Medical Education and Research, Calcutta, in collaboration with the John Hopkins University, Baltimore, U.S.A. Its field of investigation covers the villages Dalaigacha, Jalaghata, Nasibpur and Purusottampur within Singur P.S. The research work of the Centre aims at isolation of enterovirus and respiratory virus and observation of their seasonal variations as also devising an effective oral polio vaccine. Financed jointly by the State and Central Governments, the Centre provides facilities to research workers from the Department of Pathology, S. S. K. M. Hospital, Calcutta, and the John Hopkins University to carry out the aforesaid research programme.

Leprosy Control Units, Talandu and Haripal

Of the two Government Leprosy Control Units at Nalikul (Haripal P.S.) and Talandu (Magra P.S.) the former is directly under the Department of Health while the latter is run by the Tribal Welfare Department under the overall supervision of the Directorate of Health Services. Established during the Second Plan period, the Talandu Unit is primarily meant for treatment of leprosy although it is open to general patients as well. Its activities are limited to outdoor treatment, case finding and health education. In October 1966, some 984 leprosy patients were receiving treatment from this centre.[70] During the Third Plan period the State Government in collaboration with the Government of India launched a scheme for control of leprosy which envisaged a survey to detect cases, health education to foster a rational attitude towards the disease and treatment of all detected cases. The Haripal Leprosy Control Unit is one such centre which started func-

tioning from January 10, 1966 with two subordinate supervisory units at Serampore and Tarakeswar and 15 subsidiary units under them. The network covers 3 Community Development Blocks with an endemic population of about 2,22,000. In October, 1966 some 95 leprosy patients were under treatment at these centres. A survey for locating vulnerable areas is now under progress in the 250 villages under the project.[71]

Ruplal Nandi Memorial Cancer Research Centre, Chandernagore

This centre was established in a building donated by a grandson of late Ruplal Nandi of Chandernagore on 1st February, 1965. It started as an experimental chemotherapy research centre and a biological station for breeding and rearing animals for cancer research on the animal tumour system. As cancer research largely depends on examination of human patients, a clinical chemotherapy wing with 25 beds was added to the centre in November 1966. Since its inception Rs. 2.5 lakhs have been spent on buildings and equipments for the centre which also functions as a field unit of the Chittaranjan National Cancer Research Centre, Calcutta. The out-patients' wing has since been expanded and a full-fledged cancer detection centre opened in November 1966 in a new wing where diagnoses of male and female patients and technical tests like the 'pap', 'fluorochrome' and 'biopsy' tests are performed. As an additional service, the centre collaborates with the State Government's family planning unit at Chandernagore extending its technical services in insertion of intra-uterine contraceptive devices.[72]

Family planning

During the first two Plans, population control was based on a clinical approach to the problem with an increasing number of health institutions utilized as service centres which achieved little in bringing down the birth-rates During the Third Plan, the State Government launched a comprehensive campaign of family welfare planning defined in Health Department's memorandum dated July 1, 1964. The scheme was initiated in collaboration with the Central Government with a 100 per cent central subsidy on non-recurring and 75 per cent on recurring outlays. It integrated within its sphere maternity and child health programmes and the approach was more to a social balance than to mere restraint in population growth inasmuch as it included within its scope investigation and treatment of sterility cases side by side with conception control. In rural areas contraceptives were supplied free to all while in urban areas their distribution was tagged to incomes—those with a monthly income of Rs. 300 receiving them free, between Rs. 300 and Rs. 500 at half price and above Rs. 500 at full price. The final year of the Third Plan saw the campaign stepped up to an emergency basis when the implementing set-up was also reorganized. Hooghly district was selected for a pilot project for intensive popularization of the intra-uterine contraceptive device (IUCD or 'loop'), a new addition to the range of contraceptives which was tested earlier in field experiments at Singur. Since September 1965

a District Family Welfare Planning Bureau located at Chinsura co-ordinates the activities of 5 public and 3 private Urban Family Welfare Planning Centres each covering about 5,000 urban population and 10 public and 2 private Rural Family Welfare Planning Centres each commanding normally one Community Development block area. Besides, there were one mobile surgical unit for vasectomy, another for insertion of IUCDs, 6 public and 3 private contraceptive distributing units and 10 urban and 30 rural IUCD service centres for insertion of 'loops'. Beds are kept earmarked in the district, subdivisional and general hospitals and health centres for sterilization operations. Till the end of June 1966, 2,180 persons (1,560 males and 620 females) were sterilized and 18,108 women had received 'loops'.[73]

The programme entails service, education, training and research The first has been described. For the second, there is a full-scale unit with audio-visual equipments to tour both urban and rural areas. The third consists of job orientation training for the personnel as also simple orientation training for outsiders. The research wing evaluates field experiences.

Applied Nutrition Programme

Proper nutrition, particularly of the expectant and nursing mothers and children below 10 years of age, is closely related to family welfare. With the assistance of the UNICEF and the Ford Foundation a rural nutrition programme was, therefore, launched in certain areas of the district in 1965. In its educative aspect the scheme taught and helped housewives in preparing meals with higher nutritional content from cheap and readily available ingredients while on the service side distribution of skimmed milk to mothers and children at the rate of 1½ ounces per head per day was taken up through the 13 maternity clinics in the district. In Dr. H. C. Mookherjee Health School at Singur research on this nutrition programme is being carried on and a fuller scheme is in sight to be launched in the Magra and Singur blocks.[74]

Other medical institutions

Among other medical institutions in the district the most notable are the Uttarpara General Hospital, Baidyabati Dispensary and Rishra Seva Sadan. Opened in 1851, the Uttarpara Dispensary owed its origin to the munificence of the local Mukherjee family and was taken over by the Government of Bengal in June 1896. Styled as the Uttarpara General Hospital it has now become one of the major health institutions of the district with 120 beds including 20 in an annexe. Crawford has traced its history in his Hughli Medical Gazetteer.[75] The Baidyabati Dispensary was opened in March 1857 as a municipal dispensary. It shifted to its present site, a new building completed in November 1871, where it is still functioning. The Rishra Seva Sadan, a private organization, rose to its present eminence from very humble beginnings. It has now 26 beds and is fully equipped to render various specialized services. A special feature of the institution is the free 'eye camps' which it arranges since 1964 in collabora-

tion with the Rotary Club of Serampore. Recently the 'eye camp' has been accommodated in a new Eye Block attached to the Seva Sadan.

O'Malley and Chakravarti had mentioned as many as 14 medical institutions established in the district in the 19th century through private initiative.[76] Many of these have been discussed by Crawford in his Hughli Medical Gazetteer.[77]

SANITATION

Public health and sanitation set-up in the district may be broadly divided into two parts, urban and rural. The former is under municipalities in municipal towns while the latter, until very recently, was under the control of the Chief Medical Officer of Health and the Executive Engineer, Public Health Engineering with the District Officer in overall charge. The municipalities generally have a Health Officer to attend to this specific work with the help of Sanitary Inspectors, Conservancy Inspectors, Sanitary Assistants and Conservancy Assistants placed under him who look after conservancy, water supply, drainage, epidemic control, prevention of food adulteration and issuing of licences in this behalf, compilation of vital statistics, slum clearance, maintenance of burning ghats and burial grounds and administration of slaughter houses, markets and *hats*. The chief functionaries in the rural set-up are the District Health Officer, Subdivisional Health Officers and Sanitary Inspectors under them for looking after epidemic control, food adulteration, environmental sanitation and health education With the establishment of Panchayati Raj, the rural set-up has been brought under the Zilla Parishad with functional devolution through the Anchalik Parishads, Anchal Panchayats and Gram Sabhas. A more detailed treatment of this subject is to be found in Chapter XII on Local Self-Government.

Water works, drainage and sewerage

The details of the municipal water works functioning in the district under the supervision of the Directorate of Health Services, West Bengal prior to the introduction of the First Plan are given in the table[78] below:

MUNICIPAL WATER WORKS IN HOOGHLY DISTRICT (PRIOR TO 1951)

Name of municipality	Year when started	Area served (sq. miles)	Average daily supply (gallons)	Approximate population
Hooghly-Chinsura	1914	5.0	6,50,813	49,081
Uttarpara	1918	0.3	1,32,547	20,000
Bhadreswar	1926	1.95	4,71,863	27,673
Bansberia	1931	3.1	2,30,000	30,000
Champdani	1932	0.5	56,250	19,000
Serampore	1936	2.2	8,50,000	73,550

The Bhagirathi was the source of supply for the Hooghly-Chinsura, Uttarpara and Serampore water works while Bhadreswar's supply came from local mills and tube-wells and Bansberia and Champdani's from 5" diameter tube-wells. Champdani had no filtering system at that time nor were pipes laid there for domestic consumption. Besides, a water works was in existence in the then French Chandernagore.

The details of drainage and sewerage facilities available before 1951 in some of the municipalities under the supervision of the Directorate of Health Services, West Bengal are given in the following table:[78]

DRAINAGE AND SEWERAGE IN HOOGHLY DISTRICT (PRIOR TO 1951)

Name of municipality	Area served (sq. miles)	Population served (approx.)	Annual cost of maintenance (in Rs.)
Champdani	1.8	28,000	14,826
Chandernagore	—	55,000	24,074
Uttarpara	0.8	16,168	249
Serampore	6 05	Not available	Not available
Bhadreswar	0.66	20,000	5,602

With the inception of the Five Year Plans, the Public Health Engineering Directorate, West Bengal was entrusted with the task of planning and execution of various water supply projects in the district of which the following may be especially mentioned.

Konnagar Water Supply Scheme

The scheme was taken up during the First Plan period at an estimated cost of Rs. 7,38,000. Although the population of the town was then only 25,000 it intends to serve an ultimate population of 50,000 through the supply of 16,000 gallons of drinking water per day to 3,000 house connexions and 3,76,000 gallons through street hydrants estimated to meet the requirements of another 47,000 persons. The scheme envisages the sinking of two 6" diameter tube-wells with ancillary pumping machinery etc. and an elevated reservoir with a capacity of 1,50,000 gallons complete with chlorination and distribution arrangements.

Bansberia Water Supply Scheme

The scheme was taken up at an estimated cost of Rs. 2,46,100 during the First Plan period. To meet the growing requirements of the town having a population of 45,000, it envisaged boring of 4 tube-wells of 6" diameter and construction of an overhead reservoir with a capacity of 60,000 gallons complete with a pumping house, distributary pipe connexions etc.

Champdani Water Supply Scheme

As there was no arrangement for piped water supply at Champdani, a scheme at an estimated cost of Rs. 9,66,000 was taken up during the Second Five Year Plan to serve a population of 31,543 with a provision for a future growth up to 40,000 persons. The

scheme provided for an average per capita supply of 20 gallons of water per day entailing the boring of 4 tube-wells of 6" diameter and the construction of 2 overhead reservoirs with capacities of 1,00,000 and 80,000 gallons respectively.

Rishra Water Supply Scheme

The scheme was taken up during the Second Plan period at an estimated cost of Rs. 9,20,882 for providing the Rishra township piped water for its 33,000 inhabitants with an ultimate service capacity for 51,000. The estimated average supply of 20 gallons of water per head per day, called for the sinking of 4 tube-wells of 6" diameter with 2 elevated reservoirs of 1,50,000 and 40,000 gallons. The special feature of the project was the installation of bore hole pumping machinery and construction of a bore hole pumping house complete with chlorination and distribution arrangements.

Bhadreswar Water Supply Scheme

The scheme was taken up during the Second Plan period at an estimated cost of Rs. 9,93,185 for supply of water to a town of 37,000 with a projected service capacity to 50,000 persons. The distribution break-up per day was 1,20,000 gallons to 6,000 consumers through house taps, 3,80,000 gallons to 44,000 persons through street taps and an additional 12,000 gallons per day for street washing. It envisaged the boring of six 6" diameter tube-wells, construction of 3 elevated reservoirs with 60,000, 80,000 and 20,000 gallon capacities and installation of 6 bore hole pumping houses and 6 sets of bore hole pumping machinery complete with distribution and chlorination arrangements.

Chandernagore Water Supply Scheme

The project envisaged the sinking of a 6" diameter tube-well as an interim measure to relieve scarcity of drinking water in the Barasat locality till a complete remodelling of the Chandernagore Water Supply system could be undertaken. With a projected supply of 2,52,000 gallons of water per day, the scheme was taken up at an estimated cost of Rs. 61,000 along with another scheme to benefit the Haridradanga locality of the town which cost Rs. 58,500 and went into operation in March 1958.

Uttarpara Water Works Remodelling Scheme

This scheme was taken up at an estimated cost of Rs. 2,49,000 during 1964 with a view to providing the 25,000 residents of Uttarpara with 3,00,000 gallons of water per day of which 2,50,000 gallons were to be filtered for distribution through house connexions (1,17,000 gallons) and 100 street hydrants (1,33,000 gallons). There was an additional provision for 26,000 gallons of raw water for road washing etc. The head-works of the supply system were provided with highlift pumps with special valves, the existing jetties were repaired and rapid gravity filtration equipments with a capacity of about 12,000 gallons per hour were installed.

Rural services

Besides the rural water supply projects financed by and executed under the community development, tribal welfare and rural water supply programmes as also from local funds and private donations (some of which have been discussed at appropriate places elsewhere),

many tube-wells were sunk in the district by the Public Health Engineering Directorate before the Zilla Parishad took the field in 1965-66.[80]

NOTES

[1] Bangiya Sahitya Parishad—*Bhāratkosh* (Vol. I). Calcutta, 1371 B.S. p. 443.
[2] Durgadas Lahiri—Prithibīr Itihās (Vol. II). Howrah, 1319 B.S.
[3] Bangiya Sahitya Parishad—op.cit. p. 327.
[4] P. Ray (Ed.)—History of Chemistry in Ancient & Medieval India. Calcutta, 1956. p. 49.
[5] ibid. pp. 59-61.
[6] Kalyani Mallik—*Nāthasampradāyer Itihās, Darshan Ō Sādhon Pranāli*. Calcutta, 1950. pp. 118-81.
[7] W. W. Hunter—A Statistical Account of Bengal (Vol III). London, 1876. pp. 438-9.
[8] ibid. p. 439.
[9] Lt. Col. D. G. Crawford—Hughli Medical Gazetteer. Calcutta, 1903. p. 374. The Report referred to is the annual sanitary report for the year 1886 made by Dr. Lidderdale, the then Sanitary Commissioner.
[10] ibid. pp. 375-93.
[11] ibid. p. 370.
[12] L. S. S. O'Malley and Monmohan Chakravarti—Bengal District Gazetteers: Hooghly. Calcutta, 1912. p. 134.
[13] Lt. Col. Crawford—op.cit. p. 372.
[14] Brojendranath Bandyopadhyay—*Sambādpatre Sekāler Kathā* (Vol. II). Calcutta, 1356 B.S. p. 414.
[15] W. W. Hunter—op.cit. p. 417.
[16] L. S. S. O'Malley and Monmohan Chakravarti—op.cit. p. 125.
[17] A biographical sketch of Shri Mookherjee is given in Chapter XVI under the entry 'Uttarpara'.
[18] Crawford—op.cit. p. 120.
[19] Crawford—op.cit. p. 124.
[20] loc. cit.
[21] ibid. pp. 139-40.
[22] G. Toynbee (Magistrate & Collector, Hooghly)—A Sketch of the Administration of the Hooghly District from 1795 to 1845. Calcutta, 1888. p. 144.
[23] W. W. Hunter—op. cit. p. 418.
[24] ibid. pp. 433-4.
[25] ibid. p. 435.
[26] L. S. S. O'Malley and Monmohan Chakravarti—op cit. p. 128.
[27] W. W. Hunter—op. cit. p. 435.
[28] Crawford—op. cit. pp. 520-2.
[29] B. Roy—Census 1961, District Census Handbook, Hooghly (Calcutta, 1965). pp. xxvii-xxxi.
[30] ibid. pp. xxviii-xxix.
[31] A. Mitra—Census 1951, District Handbooks: Hooghly (Calcutta, 1952). p. 169 and B. Roy—op. cit. p. 354 (The birth-rates per thousand have been calculated on the total populations of 1941 and 1951 respectively while the death-rates are calculated on the populations *of the same sex* for the said years).
[32] Source: Chief Medical Officer of Health, Hooghly.
[33] There is an interesting discussion on this subject supported by a graph and data in the latest Census Handbook on Hooghly. pp. lviii-lix.
[34] Source: Bureau of Health Intelligence, Directorate of Health; Government of West Bengal.
[35] O'Malley and Chakravarti—op. cit. p. 126.
[36] Shri A. Mitra—op cit. p. 26.
[37] O'Malley and Chakravarti—op. cit. pp. 125-6.
[38] A. Mitra—op. cit. p. 26.
[39] A. Mitra—op. cit. pp. 169-71 and B. Roy—op. cit. pp. 355-6. (Death-rate has been calculated on annual death-rate per 1,000 persons of the same sex on the basis of population of 1941 for the first decade and that of 1951 for the second. The rates for deaths from child birth for 1951-60 have been calculated per 1,000 of live and still births).
[40] This is corroborated by O'Malley and Chakravarti when they observe: "The registration of deaths caused by fever is notoriously inaccurate, as a

considerable number of deaths due to other diseases. . . are ascribed to fever. . ." (O'Malley and Chakravarti—op. cit. p. 126).

[41] Crawford—op. cit. pp. 179, 184-5, 473, 482 and 492. A Mitra—op. cit. pp. 169-71 and B. Roy—op. cit. pp. 355-6. (The figures are in one-year averages calculated on the total of the 20-year cumulative figures relating to the relevant 40 years).

[42] Directorate of Health Services, Government of West Bengal—Annual Reports on the State of Health in West Bengal (Part I), 1961, 1962, 1963 and 1964.

[43] Directorate of Health Services, Govt. of West Bengal—Annual Report on the State of Health of West Bengal (Part II), 1961, 1962, 1963 and 1964.

[44] Directorate of Health Services, Government of West Bengal—Annual Reports on the State of Health of West Bengal (Part I), 1961, 1962, 1963 and 1964. 'Urban' includes all municipal towns and 'rural' indicates all other areas of the district.

[45] Directorate of Health Services, West Bengal—Annual Report on the State of Health in West Bengal, 1952, 1953, 1954 and 1955.

[46] Directorate of Health Services, West Bengal—Annual Report on the State of Health in West Bengal, 1961, 1962, 1963 and 1964.

[47] Crawford—op. cit. p. 483; B.Roy—op. cit. p. 355 and Directorate of Health Services, West Bengal—Annual Reports on the State of Health in West Bengal, 1961, 1962, 1963 and 1964.

[48] Directorate of Health Services, West Bengal—Annual Report on the State of Health in West Bengal, 1961, 1962, 1963 and 1964.

[49] The Statesman. Calcutta, December 13, 1966.

[50] Source: Chief Medical Officer of Health, Hooghly.

[51] Directorate of Health Services, West Bengal—Annual Report on the State of Health of West Bengal (Part I), 1961, 1962, 1963 and 1964.

[52] Directorate of Health Services, West Bengal—Annual Report on the Health of the Population of West Bengal, 1949. p. 1.

[53] Stavorinus—Voyages. p. 451.

[54] Crawford—op. cit. pp. 492-3.

[55] Directorate of Health Services, West Bengal—Annual Report of the State of Health in West Bengal (Part I), 1961, 1962, 1963 and 1964.

[56] Directorate of Health Services, West Bengal—Annual Report on the State of Health in West Bengal (Part II), 1961, 1962, 1963 and 1964.

[57-62] Source: Chief Medical Officer of Health, Hooghly There is a branch of the Indian Medical Association for the district.

[63] George Toynbee—A Sketch of the Administration of the Hooghly District (1795-1845). Calcutta, 1888. p. 140.

[64] Crawford—op. cit. p. 311.

[65] Crawford—op. cit. p. 307.

[66] O'Malley and Chakravarti—op cit. p. 132.

[67] The Jugantar. Calcutta, February 2, 1962.

[68] Source: Honorary Secretary, Hooghly District Tuberculosis Association, Serampore.

[69] All information about the institution was supplied by the Officer-in-Charge of Administration, Rural Health Unit and Training Centre, Singur.

[70] Source: Assistant Director of Health Services (Leprosy), Directorate of Health Services, Government of West Bengal.

[71] Source: Assistant Director of Health Services (Leprosy). Directorate of Health Services, Government of West Bengal and Medical Officer, Leprosy Control Unit, Haripal.

[72] Source: Director, Chittaranjan National Cancer Research Centre, Calcutta.

[73] [74] Source: Chief Medical Officer of Health, Hooghly. (correct up to 1965).

[75] Crawford—op. cit. pp. 320-8.

[76] O'Malley and Chakravarti—op. cit. pp. 132-4.

[77] Crawford—op. cit. pp. 298-354.

[78] Directorate of Health Services, West Bengal—Annual Report on the State of Health of West Bengal, 1955. pp. 460-73.

[79] ibid. pp. 474-5.

[80] Source: Executive Engineer, Public Health Engineering, Burdwan Division

CHAPTER XV

PUBLIC LIFE AND SOCIAL SERVICE ORGANIZATIONS

REPRESENTATION OF THE DISTRICT IN THE UNION AND STATE LEGISLATURES

Vidhan Sabha (Legislative Assembly)

During the first General Elections held in 1952, the Hooghly district was represented in the West Bengal Legislative Assembly by 14 members elected from 10 constituencies of which 4 were double-membered. The 10 constituencies were Singur (double-membered), Uttarpara, Serampore, Bhadreswar, Goghat, Arambagh (double-membered), Tarakeswar, Chinsura (double-membered), Dhaniakhali (double-membered) and Balagarh. Three seats were reserved for Scheduled Caste candidates, one each in the Singur, Arambagh and Chinsura constituencies and one seat was reserved for Scheduled Tribe candidates in the Dhaniakhali constituency.

Between the first and the second General Elections, Chandernagore, an erstwhile Union territory, became a part of the Hooghly district under the Chandernagore Merger Act, 1954 A by-election for this area alone was held in 1955 and Chandernagore has been a constituency during the succeeding General Elections.

In the second General Elections held in 1957, there were 12 constituencies in the district returning 15 representatives. The two new constituencies were Khanakul and Jangipara. The Khanakul constituency was similar in jurisdiction to the Arambagh constituency of the first General Elections consisting of the Khanakul and Arambagh police stations excluding the Arambagh municipal area. The erstwhile Goghat constituency was abolished and the Arambagh constituency of the first General Elections now comprised the Goghat police station and the Arambagh municipal area. The other new constituency, Jangipara, consisted of Jangipara, Chanditala (excluding Unions 4, 5 and 7) and Haripal (excluding Unions 2 and 3) police stations. The three double-membered constituencies were Khanakul, Dhaniakhali and Jangipara. Three seats were reserved for Scheduled Caste candidates, one each from the Khanakul, Dhaniakhali and Jangipara constituencies. There was no exclusive representation this time for Scheduled Tribes.

During the third General Elections held in 1962 (the latest when the present Gazetteer was being written), there were 15 constituencies in the district electing 15 representatives to the State Legislative Assembly. Double-membership from one constituency was done away with under the Two-member Constituencies (Abolition) Act,

1961. The three new constituencies were Chanditala, Pandua and another created by splitting the Arambagh constituency into two—Arambagh East and Arambagh West. The Chanditala constituency comprised the Chanditala police station (excluding Unions 4, 5 and 7) and the Haripal police station (excluding Unions 1, 4 and 5) and its entire area came out of the old Jangipara constituency which was left with only the Jangipara police station and three Unions (Nos. 1, 4 and 5) of the Haripal police station. The new Pandua constituency was carved out of the old Dhaniakhali constituency and encompassed the Pandua police station (excluding Unions 7 to 12) and the Polba police station (excluding Unions 8 to 12). The existing Arambagh constituency was really re-named Arambagh West during the third Elections while the new Arambagh East constituency was formed with the Arambagh police station (excluding the Arambagh municipal area) and Unions No. 1 to 3 of the Khanakul police station of the erstwhile Khanakul constituency. Three seats were reserved for Scheduled Castes, one each from the Jangipara, Pandua and Khanakul constituencies. There was no exclusive representation for Scheduled Tribes this time as well.

Lok Sabha (House of the People)

During all the three General Elections there were two one-membered Lok Sabha constituencies in the district, namely Serampore and Hooghly. In the first Elections the Serampore constituency comprised the then Serampore subdivision (excluding Haripal and Tarakeswar police stations) and the Domjur and Bally police stations of the neighbouring Howrah district. In the second Elections this constituency came to be contained entirely within the district with the whole of the present Serampore subdivision, the Chandernagore subdivision (excluding Chandernagore police station) and the Pursura police station (excluding Union No. 1) of the Arambagh subdivision, while in the third General Elections it shrank a little to cover nine police stations of the district, viz. Jangipara, Chanditala, Uttarpara, Serampore, Bhadreswar, Singur, Haripal, Tarakeswar and Pursura (excluding Union No. 1). The other Parliamentary constituency, Hooghly, contained, during the first General Elections, the Hooghly (Sadar) subdivision (excluding Balagarh and Magra police stations), the Arambagh subdivision (excluding Goghat police station) and two police stations of the Serampore subdivision, Haripal and Tarakeswar. This constituency during the second Elections had the whole Sadar subdivision, the Chandernagore police station of the Chandernagore subdivision, Union No. 1 of Pursura P.S. of the Arambagh subdivision and some portions of the Ranaghat and Chakda police stations of the neighbouring Nadia district. During the next Elections its composition underwent further change to include the Chandernagore, Chinsura, Magra, Balagarh, Pandua and Dhaniakhali thanas as also Union No. 1 of the Pursura P.S. of the Hooghly district and parts of the Ranaghat and Chakda thanas of the Nadia district.

Vidhan Parishad (Legislative Council)

In 1952, Hooghly district did not have any constituency for the Vidhan Parishad totally to itself; it was parcelled out amongst three neighbouring constituencies. In the Hooghly-Howrah (Local Authorities) Constituency, it shared the area with the district of Howrah. The West Bengal South (Graduates') Constituency consisted of the Hooghly and two other districts, viz. Howrah and 24-Parganas. The Burdwan Division (Teachers') Constituency encompassed all the districts of that division, including Hooghly.

During the 1962 Elections, delimitation processes created one double-membered constituency for the Legislative Council—the Hooghly Local Authorities Constituency—which was conterminous with the boundaries of the district. Besides, the district formed parts of two other constituencies, viz. the West Bengal South-West Graduates' Constituency and the West Bengal South-East Teachers' Constituency. In the former five other districts, Birbhum, Burdwan, Bankura, Purulia and Midnapur and in the latter three other districts, Murshidabad, Nadia and Howrah were included.

POLITICAL PARTIES AND ORGANIZATION

There are no political parties exclusive to the district. Generally speaking, the Statewide or nationwide political parties have their local organizations in the district and operate through them. From the experience of the last three General Elections it appears that the Indian National Congress, the Communist Party of India, the Socialist Party, the Hindu Mahasabha, the Jan Sangh, the Forward Bloc, the Forward Bloc (Marxist) and the Praja Socialist Party played their roles in the political arena of the district. During the first General Elections a few other parties like the Ram Rajya Parishad, the Forward Bloc (Ruikar) Party etc., did appear on the scene but the political evolution of the country and polarization of public opinion eventually brought only two or three of the all-India parties to the fore which alone played significant roles in the subsequent Elections.

It may be wrong to suppose that the political pulsations of the district are articulated only by these important parties. Time has shown that the common people are apt to respond in large numbers to spasmodic agitations on current issues. The so-called food movement, which gripped this State in the early part of 1966, had its worst repercussions in the district in places like Konnagar, Rishra and Serampore. The matter is now before a Commission appointed by the State Government and the precise political motivations behind the movement are expected to be brought to light when the Commission's report is published.

Any assessment of very recent political behaviour of the populace is likely to suffer from a lack of proper perspective. The only other alternative for a more dependable analysis—which is attempted in the following paragraphs—is to examine the results of the last three

General Elections held over a period of ten years between 1952 and 1962.

The Elections

Besides the General Elections of 1952, 1957 and 1962, two by-elections were held in the district, one in the Goghat constituency in May, 1952 and the other in the Chandernagore constituency in June, 1955.

Vidhan Sabha: First General Elections

In the first General Elections as many as 80 candidates contested for the 14 Assembly seats. Of them, 14 candidates were set up by the Indian National Congress, 6 by the Communist Party of India, 8 by the Forward Bloc (Marxist), 2 by the Forward Bloc (Ruikar), 4 by the Jan Sangh, 3 by the Hindu Mahasabha, 6 by the Krishak Majdur Praja Party, 7 by the Socialist Party, 1 by the Ram Rajya Parishad and 29 candidates fought independently.

After the polls 7 Congress candidates, 4 Communist candidates, 1 Forward Bloc (Marxist) candidate and 2 independent candidates were returned. The successful Congress candidates came from Serampore, Bhadreswar, Tarakeswar, Chinsura, Dhaniakhali (both seats) and Balagarh constituencies. The candidates of the C.P.I. were returned from Singur (both seats), Uttarpara and Arambagh constituencies while the lone Forward Bloc (Marxist) candidate won from the Chinsura constituency. Arambagh and Goghat constituencies elected two independent candidates. Of the total electroate consisting of 12,06,129 voters, 6,00,453 actually cast their votes bringing the overall poll percentage to 49.08. The Congress candidate secured 44.03 per cent of the total valid votes in the Serampore Constituency being very closely followed by a C.P.I. candidate who secured 41.44 per cent. Congress candidates won comfortably in the Bhadreswar and Tarakeswar constituencies by polling 51.22 per cent and 47.14 per cent of the total valid votes respectively. In the Dhaniakhali double-membered constituency the Congress Party captured both the seats by polling 20.03 and 19.92 per cent of the votes and in the Chinsura constituency it captured one seat but conceded the other to a Forward Bloc (Marxist) candidate by polling 19.37 per cent of the valid votes while the latter secured 18.42 per cent. At Balagarh the Congress candidate won with 35.29 per cent of the total votes. Both the seats in the Singur double-membered constituency went to the C.P.I. candidates who collected 19.68 and 16.71 per cent of the total valid votes being very closely trailed by Congress candidates who secured 17.74 and 16.64 per cent of the votes respectively. At Uttarpara a C.P.I. candidate polled 52.04 per cent of the total votes and was returned with a comfortable margin. The C.P.I. shared the two seats In the Arambagh constituency with an independent candidate by polling 25.17 per cent of the votes while the latter secured 34.24 per cent. The record for high polling in the district during this election was set up by an independent candidate in the Goghat constituency who captured 62.36 per cent of the total valid votes.

On an analysis of the votes cast for each party vis-a-vis the total number of votes polled during the first General Elections, it appears that the Indian National Congress was incomparably stronger than any of its rivals. While it got 37.01 per cent of the valid votes cast, the second best performance was of the independent candidates taken together who secured only 18.01 per cent of the same. Among the other parties, the C.P.I. secured 17.00 per cent, the Forward Bloc (Marxist) 12.8 per cent, the Jan Sangh 5.3 per cent, the Socialist Party 3.4 per cent and the Hindu Mahasabha 2.8 per cent and the rest still less.

By-election, 1952

The by-election in the Goghat Legislative Assembly constituency was occasioned by the resignation of the returned candidate who was simultaneously elected from two constituencies, Arambagh and Goghat. He chose to retain his membership from the Arambagh constituency and vacated the Goghat seat. The by-election took place on May 15, 1952 with a total number of 50,266 voters on the electoral rolls, of whom only 33.4 per cent actually exercised their franchise. The contestants numbered four, one set up by the Congress, one by the Forward Bloc (Marxist) and two were independents. An independent candidate won by polling 11,564 votes while his nearest rival, a Congress candidate, trailed far behind with a tally of only 5,791 votes.

By-election, 1956

The second by-election was occasioned by the merger of the erstwhile French possession of Chandernagore in the Hooghly district and was held on June 19, 1955. Of an electorate of 22,314 in the new Assembly constituency of Chandernagore, a remarkably high percentage, viz. 80.2, participated in the polling. There were four candidates, one from the Indian National Congress and one from the Forward Bloc (Marxist) besides two independents. An independent candidate won with 9,736 votes being followed by the Congress candidate who secured 6,248 votes.

Second General Elections

During the second General Elections held in 1957, 45 candidates contested for the 15 seats. The Congress fought for all of them, the C.P.I. for 6, the Forward Bloc (Marxist) for 3, the Hindu Mahasabha for 5, the P.S.P. for 2 and 14 candidates fought independently. The electorate had by now swelled to 13,02,533, of whom 7,03,790 persons actually cast their votes bringing the percentage to 54.03. Of the winning candidates 11 belonged to the Congress, 3 to the C.P.I. and one was an independent. Congress candidates were returned from Arambagh, Khanakul (both seats), Tarakeswar, Dhaniakhali (both seats), Chinsura, Bhadreswar, Singur and Jangipara (both seats) constituencies. A very interesting result came from the Arambagh constituency where the Congress polled 72.34 per cent of the total valid votes although the constituency had been a total loss to it during the first General Elections. The apparent paradox may perhaps be explained by the fact that the electorate favoured

the same man who had stood as an independent candidate during the first General Elections but fought under the Congress banner during the second. Other constituencies where the Indian National Congress secured comfortable victories were Tarakeswar (72 per cent of the total valid votes), Chinsura (56.80 per cent), Bhadreswar (55.48 per cent) and Singur (52.51 per cent). The Congress party also captured all the seats in the three double-membered constituencies, Khanakul (35.78 and 33.94 per cent), Dhaniakhali (27.41 and 25.71 per cent) and Jangipara (25.34 and 23.48 per cent). The C.P.I. candidates were returned from Balagarh, Serampore and Uttarpara constituencies with 47.55, 52.59, 56.66 per cent of the votes respectively. The C.P.I. candidates conceded three seats to the Congress at Arambagh and Singur constituencies while they wrested from them the Balagarh and Serampore seats. Uttarpara returned a Communist candidate in both the elections. Chandernagore again sent an independent candidate to the Legislature with 51.94 per cent of the total valid votes cast in his favour.

Third General Elections

The third General Elections were held in 1962 with a still larger electorate, 11,14,854, of which 6,84,121 actually exercised their franchise bringing the percentage to 61.4. For the 15 seats available, as many as 50 candidates took the field of whom 15 were from the Congress, 11 from the C.P.I., 2 from the Hindu Mahasabha, 3 from the Forward Bloc, 6 from the P.S.P., one from the S.B.P. and 12 candidates fought independently.

The polling results showed a slight swing to the left with 10 Congress, 4 C.P.I. and one Forward Bloc candidates being returned. A new party came into the arena during the third General Elections; it was the Forward Bloc shorn of its 'Ruikar' or 'Marxist' affiliations.

The Indian National Congress won from the Jangipara, Chanditala, Singur, Balagarh, Pandua, Dhaniakhali, Tarakeswar, Khanakul, Arambagh East and Arambagh West constituencies. C.P.I. candidates were returned from the Uttarpara, Serampore, Bhadreswar and Chandernagore constituencies while the Chinsura constituency elected a Forward Bloc candidate. The most spectacular result was witnessed in the Singur constituency where the C.P.I. nominee lost to his Congress rival by only 31 votes, the percentages of votes polled being 49.97 and 50.03 respectively. The Singur constituency had opted for the C.P.I. during the first elections but it chose to remain in the Congress fold during both the succeeding ones. Congress candidates triumphed with comfortable margins at Arambagh East (69.32 per cent of the total valid votes), Khanakul (60.94 per cent), Balagarh (56.76 per cent), Pandua (55.15 per cent), Arambagh West (51.09 per cent) and Tarakeswar (50.3 per cent). The C.P.I. candidates similarly won with majority votes in all the constituencies where they were successful, viz. 52.84 per cent at Uttarpara, 52.7 per cent at Bhadreswar, 51.39 per cent at Serampore and 50.06 per cent at

Chandernagore. The Forward Bloc candidate also secured an absolute majority in the Chinsura constituency by polling 51.4 per cent of the valid votes cast. The Bhadreswar constituency which was faithful to the Congress during the first and second General Elections, opted for the Communist party during the third. Similarly, Chandernagore which had gone to independent candidates during the initial by-election of 1954 and the second General Elections became this time a gain for the C.P.I. The Congress party wrested Balagarh from the C.P.I. and put up a good show at the Communist strongholds of Uttarpara, Serampore and Bhadreswar by securing 43.77 per cent, 48.61 per cent and 42.86 per cent of the total valid votes respectively Another interesting outcome of the third General Elections was that none of the 12 independent candidates was returned; during the first and the second General Elections their numbers were 2 and 1 respectively.

Lok Sabha: First General Elections

In 1952 there were two Lok Sabha constituencies in the district, Serampore and Hooghly, which, between them, fielded 9 candidates of whom 2 were from the Congress, 2 from the C.P.I., 2 from the Hindu Mahasabha, 2 from the Socialist Party besides one independent. In the Serampore constituency having an electorate of 3,81,914, only 1,90,924 voters (49.99 per cent) participated in the polls while in Hooghly with 3,85,944 voters no more than 1,98,385 (51.4 per cent) cast their votes. In the Serampore constituency the winning C.P.I. candidate polled 40.72 per cent of the total valid votes being followed by his Congress rival with 36.03 per cent while at the Hooghly constituency the Hindu Mahasabha candidate secured 36.19 per cent of votes and the Congress nominee got 33.72 per cent.

Second General Elections

During the second General Elections held in 1957, the number and names of the Lok Sabha constituencies remained the same. Five candidates entered the contest this time, of whom 2 were from the C.P.I., 2 from the Congress and 1 from the Hindu Mahasabha. The electoral rolls rose to 4,02,713 at Hooghly and 4,28,149 at Serampore and poll percentages were 58.00 and 57.47 respectively. A Communist candidate polled 35 per cent of the total valid votes and won from the Hooghly constituency being followed by a Congress candidate with 33.7 per cent. The position was reversed in the Serampore constituency where the Congress candidate won with 51.12 per cent of the votes and the Communist candidate trailed behind with 48.88 per cent.

Third General Elections

During the third General Elections there were 5 candidates from the same Lok Sabha constituencies. The Congress and the C.P.I. each fought for both the seats and an independent candidate contested at the Hooghly constituency. The electorate had meanwhile swelled to 5,21,686 in the Serampore constituency and 5,11,620 in the Hooghly constituency. The polling percentages also reached an all-time record touching 65.88 at Serampore and 63.32 at Hooghly. This time

the district chose squarely for the C.P.I. and both the seats were captured by it; the Congress candidates finished in either case as the runners-up. The winning C.P.I. candidates polled 51.62 and 34.64 per cent of the total valid votes at Serampore and Hooghly respectively with the Congress candidates following next with 48.37 and 33.8 per cent.

An analysis

It may be stated at the outset that any analysis of the political behaviour of an electorate based merely on slender poll statistics recorded at the elections is likely to suffer from a bias not significantly apparent on closer scrutiny of the factors involved in the process. In a new democracy like ours, the electorate does not always equate a candidate with the political programme of his party. Factors like personal popularity of the individual candidate, powerful propaganda for or against the contestants, passing agitations and the like are apt to deflect public opinion from crystalizing on the political ideologies of the contesting parties. But even admitting all these, certain broad facts emerge from the election results making them worthy of a study. One of them, for instance, is the steady evolution of the political maturity of the electorate. During the first General Elections only 49.82% of the voters in the Vidhan Sabha constituencies in the district had exercised their franchise. This scant percentage rose to 54.71 during the second and to 61.36 during the third Elections. The same upward trend was noticeable in the Lok Sabha constituencies as well where the polling percentages were 50.7 during the first, 57.6 during the second and as high as 64.6 during the third General Elections. It may perhaps be broadly stated that the electorate has, over the years, demonstrated an unmistakable widening of its democratic consciousness.

Trends: Vidhan Sabha

The following table, based on polling percentages of all the contesting parties (and the independent candidates taken as a separate group) in the Vidhan Sabha constituencies of the district during the first three General Elections. throws interesting light on their fluctuating hold on the electorate at successive Elections.

Party	Percentage of votes polled			Percentage Variations: Difference between		
	1952	1957	1962	Cols. 2 & 3	Cols. 3 & 4	Cols. 2 & 4
1	2	3	4	5	6	7
Congress	37.1	56.0	50.9	+18.9	− 5.1	+13.8
C.P.I.	17.0	18.6	33.0	+ 1.6	+14.4	+16.0
Jan Sangh	5.3	—	—	—	—	—
Socialist Party	3.4	—	—	—	—	—
F.B. (Ruikar)	0.3	—	—	—	—	—

Percentage of votes polled				Percentage Variations		
				Difference between		
Party	1952	1957	1962	Cols. 2 & 3	Cols 3 & 4	Cols. 2 & 4
1	2	3	4	5	6	7
F.B. (Marxist)	12.8	6.0	—	− 6.8	—	—
F.B.	—	—	7.5	—	—	—
P.S.P.	—	3.0	1.1	—	− 1.9	—
Hindu Mahasabha	2.8	4.1	0.5	+ 1.3	− 3.6	− 2.3
K.M.P.P.	3.1	—	—	—	—	-
Ram Rajya Parishad	0.1	—	—	—	—	—
S.B.P.	—	—	0.1	—	—	—
Independents	18.1	12.3	6.9	− 5.8	− 5.4	− 11.2
Total	100.0	100.0	100.0			

The above figures reveal that during the first General Elections the Indian National Congress, with 37.1% of the Vidhan Sabha votes cast in its favour, was the most popular political party in the district and that the C.P.I., with a poll percentage of only 17, was but a poor second. During the next Elections the Congress party considerably improved its position by capturing 56% of the total votes but the Communists continued to trail far behind with only 18.6% of the votes cast in their favour. A definite shift towards the left made itself felt for the first time in 1962 when the C.P.I. was able to raise its gains from 18.6% to as high as 33% partly at the expense of the Congress which, although retaining an absolute polling majority, climbed down from 56% to 50.9%. The relative ascendancy of the C.P.I. is also attributable to the decline in the fortunes of the independent candidates. During the first General Elections as many as 29 of them were in the field but their number precipitately dwindled to 14 and 12 during the second and the third. Apart from their numbers, the independent candidates had captured no less than 18.1% of the total votes in 1952 but the corresponding figures for 1957 and 1962 were only 12.3% and 6.9% respectively. As a consequence, against two independent candidates returned from Vidhan Sabha constituencies in 1952, there was only one in 1957 and none in 1962. Broadly speaking, the reverses suffered by the Congress and independent candidates materially added to the strength of the C.P.I. during the third General Elections.

In spite of quantitative variations in the supporting polling percentages, the Congress party has so far enjoyed the largest representation from the Vidhan Sabha constituencies in the district. During the

first Elections, rightist parties like the Jan Sangh, the Hindu Mahasabha and the Ram Rajya Parishad captured 5.3, 2.8 and 0.1 per cent of the total votes respectively. But from the second Elections onwards all of them are out of the picture except the Hindu Mahasabha whose political fortunes also appear to be on the decline. The real threat to the popularity of the Congress, which has been the majority party all along, is now not so much from the parties of the right as of the left like the C.P.I., the P.S.P. and the Forward Bloc whose combined strength is decidedly a force to reckon with.

Subjective approaches to election issues are often conditioned by environmental circumstances, a fact which explains the varying reactions exhibited by urban and rural electorates over identical political questions. This customary phenomenon should be especially borne in mind while attempting an analysis of the overall behaviour pattern of the voters of the district.

In this context, it is not of little consequence that during the third General Elections all the urban municipal areas of the district fell within the 6 Vidhan Sabha constituencies of Uttarpara, Serampore, Bhadreswar, Chandernagore, Chinsura and Arambagh (West) and that the remaining 9 Vidhan Sabha constituencies comprised predominantly rural areas with the result that the verdict of the urban and rural electorates followed more or less certain broad norms which are analysed in the following paragraph.

Uttarpara, an urban constituency, has steadfastly sponsored C.P.I. candidates in all the three elections Serampore, another urban constituency, favoured the Congress party first but went over to the Communists during the two successive elections. Similarly, the Bhadreswar constituency returned Congress candidates during the first two elections but supported the C.P.I. during the third. Chandernagore, which had chosen two independents in 1954 and 1957 showed its preference for the Communists in 1962. Chinsura and Arambagh (West) proved a little different. The two seats in the Chinsura double-membered constituency were shared by the Congress and the Forward Bloc (Marxist) during the first General Elections. But during the second, when the constituency had only one seat, it chose a Congress nominee and during the third, it went over to the Forward Bloc. Arambagh had backed an independent and a Communist candidate during the first General Elections but emerged as a champion for the Congress during succeeding Elections. Except for Arambagh, the allegiance of the urban Vidhan Sabha constituencies has, therefore, swerved to the left over the years. The 9 rural constituencies on the other hand had distributed their favours between the Congress and the C.P.I. during the first two elections, but opted unequivocally for the Congress during the third. While the electorates of Dhaniakhali, Tarakeswar, Khanakul and Jangipara never forsook the Congress, the three new constituencies of Arambagh (East), Pandua

and Chanditala voted for the same party during the third Elections. The performance of the Singur and Balagarh constituencies has been slightly more chequered inasmuch as the former chose a Communist candidate to start with but moved into the Congress camp during the second Elections and stayed there during the third. Balagarh on the other hand started with a Congress candidate, had a short-lived *entente* with the C.P.I. during the second, and returned to the Congress fold during the third. All this empirical evidence tends to prove that the shift towards the left noticed in the Vidhan Sabha constituencies of the district in course of the first three General Elections has happened more or less exclusively in the urban constituencies while the rural constituencies generally stuck to the centre.

Lok Sabha

It is a little confusing that in selecting candidates for the State Legislature, the district favoured by and large the centrist parties but in making its choice for representations to the Lok Sabha it leaned heavily towards the left. In the first Elections it sent a C.P.I. and a Hindu Mahasabha candidate to the House of the People thus dividing its affections equally between the left and the right. During the second, it moved a little to the left by choosing a Communist and a Congress candidate. But during the third, the shift to the left was more pronounced when both the Lok Sabha seats went to the Communists. The apparent paradox of a wholesale left representation at the Centre and a centrist majority at the State level is not altogether irreconcilable. For a clearer assessment of this issue one has primarily to remember that the total of valid votes cast for the Lok Sabha elections was only 6,47,876 while that for the Vidhan Sabha elections was as high as 6,84,121. Of the former, the centrist party captured only 41.4 per cent but of the latter it secured 50.9 per cent. Therefore, on a percentage basis, the centrist party was weaker to an extent of about 9.5 in the Lok Sabha elections. On the other hand, the corresponding polls for all the leftist parties taken together were 41.7 per cent in the Vidhan Sabha and 43.4 per cent at the Lok Sabha constituencies, or a gain of only 1.7 per cent of the votes in respect of the parliamentary elections. The reason for the total failure of the centrist party in the Lok Sabha contest has, therefore, to be sought elsewhere than in the apparently bewildering duality in the voting behaviour of the Hooghly electorates. It appears that in one of the two Lok Sabha constituencies an independent candidate polled as many as 98,679 valid votes, a figure far higher than the votes polled by all the independent candidates together in all the Vidhan Sabha constituencies which aggregated only 47,259. This independent candidate, although he did not win, not only polled the total number of independent votes in the Vidhan Sabha elections but also took away for himself another 51,420 votes. To this should be added the numerous rightist votes, which in all likelihood, went to

the same candidate, a political figure of all-India renown. The gap thus created in the polling strength of the centrist party coupled with the usual but imponderable vacillations among the marginal voters was perhaps the reason for the centrist debacle in the Hooghly district in the Lok Sabha elections of 1962.

NEWSPAPERS AND PERIODICALS

Defunct and old periodicals

As a part of the pioneering activities of the Baptist missionaries of Serampore* in the realm of Bengali language and literature, the *Digdarsan*, the first periodical in Bengali, made its appearance in Serampore in April, 1818. It was a monthly journal intended to fulfil the role of an "Indian Youths' Magazine" according to its publishers. The periodical used to contain articles on history, geography, religion and various other branches of knowledge. Soon after the emergence of the *Digdarsan*, the missionaries of Serampore brought out a Bengali weekly under the title *Samachar Darpan* which appeared in May, 1818. This was perhaps the first weekly newspaper to be published in the Bengali language. Later, the *Samachar Darpan* was converted into a bi-weekly. In the same year, the Serampore missionaries started publishing the Friend of India, a monthly newspaper in English. Of the three journals starting their careers one after the other in quick succession, the Friend of India had the longest life extending up to 1874 when it was amalgamated with the Calcutta daily, The Statesman. The *Samachar Darpan* was discontinued in 1841 or rather transferred to an Indian editor in Calcutta in whose hands it soon ceased to exist. It was revived in May 1851 but did not continue for more than a year and a half. The *Digdarsan* had the shortest career being closed down in 1821 after the publication of its twenty-sixth issue. Following the pioneering enterprise of the local missionaries in the field of journalism, a number of periodicals, mostly in Bengali, appeared in Serampore of which the *Jnanarunodaya*, a Bengali monthly, deserves special mention. Appearing in 1852 it was the first magazine to be published entirely under Bengalee management. Chinsura, the district town, saw the publication of its first periodical, a Bengali monthly named *Subodhini*, in January 1858 under the editorship of one Ramchandra Dixit, a Brahmin of north Indian origin. It was followed by a number of other journals of which the Education Gazette, the *Sadharani* and the *Chunchura Bartabaha* are worth mentioning. The Education Gazette, a Bengali monthly, originated in Calcutta in 1856 with the object of supplying the people in the interior of the country with a newspaper cheap in price and healthy in tone. In 1869 its management was taken over by Bhudeb Chandra Mukhopadhyaya† who

*For a fuller account of the activities of the Serampore missionaries, please see the Appendix written by Dr. S. B. Chaudhuri

†For a biographical sketch of Bhudeb Chandra Mukhopadhyaya, please see Appendix entitled 'Eminent Sons of Hooghly'.

transferred the seat of its publication from Calcutta to Chinsura. The paper continued for a long time. The weekly *Sadharani*, brought out in 1873 by Akshaya Chandra Sarkar, the noted Bengali *litterateur*, used to contain articles contributed by famous writers including Bankimchandra Chattopadhyaya and became very popular. It was discontinued in 1884. In 1893 a weekly newspaper in Bengali started publication in Chinsura under the name of *Chunchura Bartabaha*. It is still in circulation and enjoys the distinction of being the oldest Bengali newspaper in West Bengal.

Current periodicals

The periodicals now published from the district are mostly in the Bengali language. The *Chunchura Bartabaha* published from Chinsura, the *Srirampur Samachar* and the *Palli Dak*, both weeklies, published from Serampore, the *Panchayet* and the *Samadhan*, two fortnightlies published from Tarakeswar and Hooghly respectively, are prominent journals of the district. The *Bartaman Bharat*, a fortnightly, appearing from Chinsura and the *Yugabarta*, a weekly, published from Makalpur in Dadpur P.S., are other magazines deserving mention. These local journals mainly cater news and views on current topics emphasizing those relating to the district. The *Punyabhumi*, a weekly journal published from Tarakeswar, deals with religious subjects. The *Nava Sangha*, the fortnightly organ of the Prabartak Sangha of Chandernagore, is published from the same place. These journals, by ventilating local sentiments and aspirations, act as a forum for the expression of public opinion and thus play an important role in a free democracy.

Calcutta papers

No daily newspaper is published from the district. The popular Calcutta dailies, both in English and in Bengali, like The Statesman, the Amrita Bazar Patrika, the Hindusthan Standard (all in English), and the *Jugantar*, the *Ananda Bazar Patrika*, the *Dainik Basumati* (all in Bengali) are in common circulation in the district. Two Bengali weeklies published from Calcutta, viz. the *Desh* and the *Amrita* are also widely read.

VOLUNTARY SOCIAL SERVICE ORGANIZATIONS

The history of the activities of social service organizations in the Hooghly district can be traced back to the early years of the 19th century when the Baptist missionaries of Serampore started their pioneering work for the spread of education and the development of the Bengali language and literature. Other organizations and trusts were also formed in the last century with similar ideals. These have been discussed in the chapter on Education and Culture.

Leadership in social service in the 19th century came either from the foreign missionaries or from the elite of the local society. With the spread of education and growth of social consciousness among the educated middle classes, new forces emerged in the field of social service from the beginning of the present century. These elements changed the character of the social service organizations and

widened their scope to cover all facets of the social and economic life of the people.

Prabartak Sangha

The foremost and the earliest of such institutions to be formed in the district was the Prabartak Sangha of Chandernagore which took shape out of a combination of the spirit of nationalism and the creative idealism of a group of devoted youngmen working under the leadership of Matilal Roy who founded a philanthropic organization known as the Satpathabalambi Sampradaya around 1902. Its objective was to translate the ideals of Ramkrishna-Vivekananda into action. But neither the founder nor the workers of the institution could remain aloof from the prevailing political situation in the country. In the wake of the partition of Bengal in 1905, Matilal Roy and his colleagues identified themselves with the cause of the revolutionaries and carried the spirit of nationalism to the French territory of Chandernagore. Physical culture clubs were started in various localities of the town for lathi, dagger and boxing exercises. In their weekly study circles revolutionary literature was read and discussed. It was from these study circles that the first batch of the Sangha's workers emerged. Soon a section of the Swadesi agitators took to the path of terrorism and the organization formed by Matilal Roy at Chandernagore supported this extremism and became a shelter for revolutionaries fleeing from British India. One such absconder was Sri Aurobindo who came to Chandernagore in 1910 and called upon Matilal to eschew the path of violence and devote his energies to constructive activities based on a noble spiritual life. Since then the organization has been wedded to these ideals.

During the non-co-operation movement of 1921 more workers of mettle joined the Prabartak Vidyapith (for that was the name of the institution at that time) and they along with the earlier group formed the core of the Prabartak Sangha. In 1925 the members of the Sangha accepted Matilal Roy as their Sangha-guru and were initiated by the latter in Sangha life which aimed at a thorough rejuvenation of the cultural, social and economic existence of the country through the evolution of a spiritual community. Starting with an agricultural farm and a weaving centre, the Sangha gradually built up an elaborate complex of commercial and industrial establishments and philanthropic organizations. In 1932 the economic activities of the Sangha were placed under the Prabartak Trust. In the social and cultural fields the Sangha founded the Prabartak Mahila Sadan at Chandernagore in 1943 in collaboration with the Hindu Mahasabha for providing shelter to famine-stricken women. In its present expanded form, the Mahila Sadan is one of the biggest organizations run by the Sangha providing vocational training to its inmates numbering 125, and general education to those that need it. The courses include weaving, tailoring, sewing and printing. For the first three months the trainees joining the industrial section are required to pay a small fee

but on completion of the training they become regular wage-earners as the products turned out by them are sold in the market. Inmates receiving general education are required to teach in the educational institutions of the Sangha. The Mahila Sadan receives financial assistance from the Government of West Bengal and the Central Social Welfare Board. The Sisu Sadan, an annexe for children, is a growing institution; its entire costs, including the educational expenses for the inmates, are borne by the Sangha.

The educational institutions run by the Sangha in Chandernagore are (*i*) the Prabartak Pathsala, a primary school with 350 pupils, (*ii*) the Prabartak Bidyarthi Bhavan, a higher secondary multipurpose school having a roll strength of 650, (*iii*) the Prabartak Nari Mandir Uchchatara Balika Bidyalaya, a higher secondary multipurpose school for girls with 850 students on its rolls, (*iv*) the Prabartak Buniadi Bidyalaya, a basic school with 350 students and (*v*) the Prabartak Chatushpathi, a free Sanskrit College recognized by the Government of India. Residential students are provided with free boarding and lodging. Outside Chandernagore, the Sangha runs educational institutions at Raninagar in Burdwan, Dadpur in Howrah and Belgharia and Freserganj in 24-Parganas district.

The Prabartak Sangha has taken over in the Goswami Ghat area of Chandernagore a large *navaratna* shrine flanked by several minor *atchala* temples. The main temple has been renovated and named Sri Prabartak Mandir. In it was installed the emblem of the Prabartak Sangha on the *Akshaya Tritiya* day of the Bengali year 1330 (A.D. 1923). The shrine also houses a Siva-*linga*. The annual festival of the Sangha, known as the *Akshaya Tritiya Utsab*, is held in its precincts on the *Akshaya Tritiya* day in early May.

Baidyabati Youngmen's Association

The Baidyabati Youngmen's Association, an important social service organization of the district, was established in 1908. Its patrons have played an active role in spreading the library movement in Bengal and in organizing the Hooghly District Library Association and the Bengal Library Association. Its own library, one of the biggest in the district, contains 21,000 volumes and has a text book section for the benefit of students. A fragmentary typescript of a very rare book called 'Dutch Activities in the East', which has since been edited by Dr. Niharranjan Ray and published by the Calcutta University, is among its prized possessions. The library has a publication branch which has brought out a number of books. Other wings include a Women's Section, a Children's Corner and an Infant Health Centre. The Women's Section runs handicrafts and tailoring classes, holds exhibitions of the products and organizes excursions and competitions. The Children's Corner arranges Sunday gatherings, excursions, exhibitions, sports and hobby centres through which the participants receive educative training. The Infant Health Centre, established with financial aid received from the Central Welfare

Board, conducts regular health check-ups, distributes medicines and nutritious diet and gives medical advice to parents.

Chunchura Anath O Dustha Bhandar

The Chunchura Anath O Dustha Bhandar at Shandeswartala in Chinsura town has been rendering material help to indigent persons of the locality since its inception in 1919. It distributes rice, garments and clothes free of cost and helps poor students with books and money. The Bhandar also maintains a library.

Bhadrakali Association

The Bhadrakali Association, established in 1921, maintains a free reading room and a library with 8,150 books which is affiliated to the West Bengal Library Association. It also runs an *Anath Bhandar* for helping distressed persons of the locality and a separate section for conducting sports and games.

Bharat Scouts and Guides

The history of the Scout movement in the district goes back to 1921 when the first troop was formed. The Hooghly-Chinsura Boy Scouts Local Association came into being in 1923 as a branch of the Bharat Scouts and Guides Association. At present the Scouts section is divided into 5 Rover Crews with 90 Rovers, 11 Scout Troops with 288 Scouts and 11 Cub Packs with 249 Cubs. There are 83 Scouters to train the members of these groups. The Guides section consists of 11 Guide Companies with 331 Guides and 7 Bulbul Blocks with 210 Bulbuls. The number of Guiders is 25. Annual Scouts and Guides camps are organized by the Association for extensive training. Besides rallies and campfires are arranged by the individual groups as also by the Association. In the periodical exhibitions held by the Association, the Scouts and Guides get opportunity for displaying their handicrafts etc. For rendering social service, the Scouts and Guides associate themselves with various local organizations as and when called for. They also work as volunteers during religious festivals when big crowds congregate at different pilgrim centres. The Association also plays an active part in Civil Defence measures and has given the necessary training to many of its members.

Sakti Sangha, Konnagar

The Sakti Sangha of Konnagar was established in 1923 with the intention of imparting physical training to local youngmen and conducting games among them. Subsequently, it started a library which has now 3,000 books and is divided into two sections, one for the children and the other for the general public. The Sangha receives financial assistance from the local municipality and the Government for maintenance of the library.

Akuni Youngmen's Association

Founded in 1924, the Akuni Youngmen's Association (in Chanditala P.S.) serves the village community in various spheres of rural life. It runs a charitable homoeopathic dispensary, a poor-fund, a night school, a girls' school and a library.

Bratachari Society

The Bratachari movement in the district was inaugurated in 1933 even before the formation of the Bengal Bratachari Society. Later, the Hooghly unit came under the central organization, the Bengal Bratachari Society. The district branch organizes training camps and

its instructors also impart training when called for by other institutions.

Chandannagar Sakti Sangha

The Chandannagar Sakti Sangha was founded in 1934 for the physical and moral upliftment of the people of the area. In 1946 the Sangha became affiliated with the Jatiya Krira O Sakti Sangha and its members have since been active participants in the training camps run by the central body. It has laboured hard for the revival of indigenous games like *kabadi* and has worked for the development of the Hatkhola area of Chandernagore where it is situated.

Rashbehari Sakti Samity

The Rashbehari Sakti Samity of Sahaganj, Bansberia, was formed in 1940. Primarily an organization for physical culture, the Samity also runs a night school, a basic school and a free dispensary to cater to the needs of the poor.

Indian Red Cross Society

Although the Hooghly district branch of the Indian Red Cross Society was formally opened in 1944, it started the King George V Silver Jubilee Maternity & Child Welfare Centre with 23 beds at Tamlipara, Chinsura in 1940 in a house gifted by a benevolent gentleman. In 1965 the centre attended to 271 pre-natal, 154 post-natal and 389 delivery cases while the members of its staff made 488 home visits. The district branch maintains two ambulances, one at Chinsura and the other at Chandernagore. Apart from attending to general calls, these vehicles with first aid parties remain in attendance on the occasion of sports, fairs, the immersion ceremony of Jagaddhatri at Chandernagore and the Rathajatra festivals of Mahes and Chandernagore. The district branch of the Society distributes medicines, cloths, garments etc. from time to time.

Ramakrishna Math and Mission

The Kamarpukur (Goghat P.S.) branch of the Ramakrishna Math and Mission was founded in 1947 for preserving the ancestral house where Sri Ramakrishna Paramahansa was born. Subsequently, the Mission wing has set up a number of institutions for the benefit of the local people. These are—(*i*) a Pre-Basic (Nursery) school having 28 boys and 22 girls on its rolls, (*ii*) two units of Junior Basic school with 248 boys and 143 girls, (*iii*) two units of Senior Basic school with 138 boys, (*iv*) a Higher Secondary school with a roll strength of 112 students, (*v*) a School-cum-Community Centre, (*vi*) one Students' Home with 125 inmates, (*vii*) a Sanskrit school having 43 students, (*viii*) an Outdoor Dispensary which handled 17,316 cases in 1965-66, (*ix*) an Audio-visual Mobile Unit with generator and projector, (*x*) one Pre-vocational Training Centre, (*xi*) a large guest house for the visiting pilgrims and (*xii*) an Area Library functioning under the Education Programme of the State Government.

Bhupendra Bani Mandir

Founded in 1948, the Bhupendra Bani Mandir at Haraldaspur (Pandua P.S.) engages itself in the spread of education and economic development of the area. It runs a girls' school, a primary school, a library and a co-operative society.

Chatra Mahila Pathagar & Silpasram

The Chatra Mahila Pathagar and Silpasram at Chatra in Serampore town was founded in 1948 by a group of ladies of the locality. They started with a small library but soon extended their activities establishing a Silpasram for providing vocational training to the women of the locality, especially those who had migrated from East Bengal. In its present expanded form the Silpasram consists of three sections, viz. the *Silpabibhag* (industrial section), the *Kalabibhag* (arts section) and the dance and music section. The *Silpabibhag* provides training in tailoring, embroidery works, knitting and spinning and functions as a recognized training centre under the Directorate of Industries, West Bengal competent to teach students for the Lady Brabourne Diploma Course. A number of its pupils has received this diploma. In the *Kalabibhag*, trainees receive instructions in various handicrafts. The library contains 4,000 books. With financial assistance received from the Governor and the Director of Public Instruction, West Bengal, the library stocks text books for the benefit of students appearing in the degree examination with Honours in eight different subjects including Bengali as also in the M.A. examination in Bengali.

Kumud Smriti Sangha

The Kumud Smriti Sangha of Champdani (Bhadreswar P.S.) was formed in 1948 by amalgamating the Kumud Bandhab Memorial Association (established in 1936) with Kumud Memorial Public Library (established in 1938). The library of the Sangha contains 7,606 books and its members undertake relief works from time to time.

Serampore Rifle Club

The Serampore Rifle Club was started in 1948 and formally inaugurated in November, 1949 with a three months' training course. At present the club has a shooting range of its own with a pavilion. The members undergo a six months' training course in theory and in practice. The club has achieved signal success in various competitions held in India and abroad mainly through the excellent marksmanship of its top shooters of whom Mrs. Sovita Chatterji ranks as the foremost. At the time of the Chinese invasion in 1962, an Emergency Training Camp was organized by the club which, by its spectacular all-round performance, has earned for itself the reputation of being one of the finest of its kind in India.

Suhrid Sangha

The Suhrid Sangha of Chandernagore was founded in 1951. It conducts indoor and outdoor games, renders medical aid to the needy and extends financial assistance to poor meritorious students. The library of the Sangha has a text book section, a free reading room and a collection of 1,430 books and 5 manuscripts.

Aniya Pallimangal Mahila Samity

The Aniya Pallimangal Mahila Samity at Aniya (Chanditala P.S.) has been functioning since 1952 as a branch of the Aniya Pallimangal Samity. It runs a sewing centre and has taken up a scheme for spreading literacy amongst the womenfolk of the area.

Bibek Dal

Formed as a football club in 1953, the Bibek Dal of Bhadrakali (Uttarpara P.S.) is now actively engaged in social service. It runs a Pre-Basic school with 52 students, a Junior Basic school having a

roll strength of 55, a library with 1,250 books and two music schools. In its Sisu Mahal, children are introduced to various branches of fine arts. The organization has a public relations branch which settles minor disputes among the inhabitants of the locality and volunteer force to render service to the people of the area.

Mandara Unnayan Samsad

The Mandara Unnayan Samsad at Mandara (Dhaniakhali P.S.) was formed in 1957 to carry on social welfare work in the area. Its activities include the sinking of tube-wells, metalling of village roads, free distribution of milk to children from its centre at Bhandarhati, supplying tiffin to about 250 primary students of the locality, running a tailoring unit for women and maintaining a Children's Health Clinic and a charitable dispensary. The Samsad also runs a Junior High school and a library with 1,172 books. It receives financial assistance and other collaboration from the West Bengal Council for Child Welfare, the Meals for Millions Association of New Delhi, the West Bengal Council for Women and the local Block Development Office.

Uttarpara Thana Samaj Sebak Samity

The Uttarpara Thana Samaj Sebak Samity is engaged in welfare activities amongst students and children of the locality since its inception in 1958. It has set up a chain of centres for the free distribution of milk, medicines and garments. To help poor school students the Samity supplies text books to them free of cost and has built up a book bank which caters to the needs of 60 to 70 students annually. Financial assistance in meeting the expense towards examination fees, admission fees etc. is also extended to deserving candidates.

Rotary Club, Serampore

The Rotary Club of Serampore, functioning since 1960, has opened an Eye Infirmary at the Rishra Seva Sadan. Each year over 100 cataract operations are performed here for which as also for the glasses supplied no charges are made. The club has also started a hospital at Makhla, near Uttarpara, to serve the needs of the locality. These schemes have won for the club the Paul Harris Award for the best charitable project run in Rotary District No. 325. The club has also started adult education centres at Rishra and Makhla and a charitable homoeopathic dispensary at Rishra in collaboration with Sri Ramakrishna Asram at Mahes. Besides, the club has established a children's park at Rishra and a book bank for high school students at Serampore.

Rotary Club, Hooghly

The Rotary Club of Hooghly was inaugurated in 1962. It has donated primary school buildings to the villagers of Tegharia, near the factory of Dunlop Rubber Co. and at Ramnagar in Balagarh P.S.; a pavilion on the Chinsura maidan for the Scouts and Guides; three tube-wells to the village community of Dumurdaha (Balagarh P.S.); a children's park to the Jatiya Krira Sakti Sangha at Khamarpara, Bansberia; four book banks at Srigopal Banerji College at Baghati, the Women's College at Hooghly, the St. John's Higher Secondary School at Bandel and the Balika Vidyalaya at Hooghly and two beds

to the Hooghly Maternity Home at Chinsura. The club also runs literacy centres in the villages of Bispara and Raghunathpur in the Magra police station. A mobile eye clinic also functions under the auspices of the club.

Janai Abhaya Samaj Siksha Kendra

The Janai Abhaya Samaj Siksha Kendra at Janai (Chanditala P.S.), functioning since 1963, endeavours to spread literacy among adult women of the area and to educate them in family planning. The Kendra also helps poor and meritorious students through free gifts of text books.

Bharat Sevak Samaj

The Bharat Sevak Samaj started its rural upliftment work in the district in the year 1963. Its units now function at Balagarh, Pandua, Goghat, Arambagh, Khamarpara (in Bansberia town) and Singur. The Samaj has prepared a number of development schemes and is trying to realize them in practice with the help of the local people.

Certain other voluntary organizations exclusively connected with libraries, museums and literary societies have been dealt with in the chapter on Education and Culture.

LABOUR WELFARE

In August 1947 there were only four labour welfare legislations in West Bengal, viz. the Workmen's Compensation Act 1923, the Trade Unions Act 1926, the Payment of Wages Act 1937 and the Industrial Employment (Standing Orders) Act 1946. After independence, betterment of the labourers' lot came to be recognized as an important ingredient of State policy resulting in the passing of the Industrial Disputes Act 1947. the Factories Act 1948 (this act provides for welfare measures both within and without the factories), the Employees State Insurance Act 1948 (an important welfare measure insuring a labourer's life against physical hazards like sickness, maternity etc.), the Minimum Wages Act 1948, the Plantation Labour Act 1951, the Employees' Provident Fund Act 1952, the Maternity Benefit Act 1961 and the Payment of Bonus Act 1965. By making profit-sharing enforceable by law, efficiency of production units has been directly linked with the labourers' interests. On the other hand, through a built-in institution of arbitration over industrial disputes, a shock-absorbing mechanism has been created for preventing frictions between labour and management in order to maintain industrial peace.

Apart from compulsive legislations, the State has come forward with positive schemes for labour welfare. In 1966, 44 labour welfare centres functioned in the State directly under the Government of West Bengal, 3 of which were located in Hooghly. These were the model labour welfare centre at Tarapukur Gardens, Serampore and two ordinary labour centres at Telinipara and Rishra which are purposely located at densely populated labour areas and oriented towards fostering a useful and recreative social atmosphere for the labourers and their families. The activities of such centres lie in the

field of education through the running of primary schools, adult education classes and audio-visual exhibitions, in the domain of health through the establishment of dispensaries under qualified doctors and distribution of medicines free of cost to the workers and their families, in useful vocational training like leather works, knitting, tailoring etc. and in youth movements like scouting, sports etc. During 1966 (up to the month of August), the average daily attendance at the Serampore model centre was 154 industrial labourers, 92 others and 43 children attending primary classes.[1]

Apart from the steps taken in this behalf by the Government, some of the bigger industrial concerns in Hooghly have undertaken by themselves certain welfare measures for their workers. The Dunlop Rubber Company at Sahaganj, the North Mill at Bhadreswar, the Hindustan Motors at Uttarpara, the Alkali & Chemical Corporation of India at Rishra are among those worth mentioning. Their accomplishments include cheap housing, free hospitals, subsidized canteens, arrangements for indoor and outdoor games. education for employees' children, supply of milk and drinking water etc. These are besides such profit sharing arrangements as payment of annual bonus, facilities of contributory provident fund, gratuity benefits and the like.*

Advancement of Backward Classes and Tribes

The Scheduled Tribes and Scheduled Castes of Hooghly district number 90,106 and 4,45,208 respectively according to the Census of 1961. Their growth, characteristics, group significance and measurable social changes have been dealt with in the chapter on People.

The State is now actively helping this comparatively backward population to come up and join hands with the rest of the community. In the Hooghly district a separate administrative section under the direct supervision of the District Magistrate was set up for their welfare as early as in 1957. From 1964-65 the District Tribal Welfare department has oeen placed under an officer of the West Bengal Junior Civil Service having the designation of Special Officer, Tribal Welfare. Under him are a Kanungo to look after land problems, a Sub-Assistant Engineer to supervise building and construction projects and an Inspector for organizing educational and industrial schemes. There are 3 Tribal Welfare Centres in the district at Belun, Hasnan and Somaspur where night classes are held and other educational and social activities carried on. An account of the impact of educational measures on this backward populace has been given in the chapter on Education and Culture and is, therefore, not repeated here.

Other development schemes for the welfare of the Scheduled Castes and Tribes in the district are in the fields of sanitation, public health, housing, trade, communications, agriculture, irrigation, live-stock

*For a fuller account of labour welfare measures, please see chapter on Industries.

and poultry farming and legal assistance. The following table gives a yearwise break-up of the money spent on these measures in recent years.[3]

Schemes on	1960-61 (Rs.)	1961-62 (Rs.)	1962-63 (Rs.)	1963-64 (Rs.)
Minor irrigation	—	—	17,488	5,993
Aid to artisans	540	330	1,600	—
Housing and land purchase	83,788	—	22,629	25,644
Drinking water supply	33,473	10,000	11,491	5,998
Free legal aid	296	344	—	32
Co-operative grain gola	2,440	--	49,032	47,700
Agriculture and cattle purchase	700	—	7,000	--
Live-stock and poultry farming	1,885	1,934	2,000	2,676
Total	1,23,122	12,608	1,11,240	88,043

One of the main impediments to the amelioration of the lot of these backward people has been the concerted move on the part of the rural moneyed classes to alienate their lands, which, in an agrarian economy, is the basis of all prosperity, social or economic. In order to stop this nefarious practice, special legislations have been enacted making transfer of land owned by tribal people subject to Government supervision. This, combined with the spread of education and other welfare measures, has helped these neglected people to become conscious of their rights as also of the vital role that they have to play in a progressive society.

PROHIBITION

Instead of launching an all-out drive for complete prohibition in the State, certain fringe restrictions have been imposed by prohibiting the sale of liquor, country spirit, ganja, opium, bhang, toddy and *pachwai* on a fixed day in the week in certain notified industrial areas. Thursday is the dry day observed in Chinsura and Magra police stations in the Sadar subdivision; and Serampore, Uttarpara and Bhadreswar police stations (excluding the villages Khalisani, Nabagram, Jugipukur and Mankundu) in Serampore subdivision. The relevant notifications were issued as early as November 1948, February 1949 and May 1949. In addition, since December 1949, excise and opium shops all over West Bengal are compulsorily closed on 4 days, viz. the Independence day (15th of August), the birth day of Mahatma Gandhi (2nd of October), the Republic day (26th of January) and the Mahastami day (second day of the Durga Puja).

Besides, the excise shop owners have the option to keep their shops closed for 11 days in a year on the occasion of the birth day of Netaji Subhas Chandra Bose (23rd of January), Rathajatra, Janmastami, Saraswati Puja, Ram Navami, Id-ul-Fitre, Bakr-id, Fateha Duaz Daham, Muharram, Jagaddhatri Puja and the first day of the Bengali year. Tapping of palm juice for preparing toddy in the Jagatpur village of the Khanakul P.S. has also been prohibited with effect from the 1st of April, 1956.

In order to persuade people for keeping away from intoxicants a scheme is now under consideration of the State Government and an officer, designated as Special Officer, Temperance, has been appointed under the Commissioner of Excise to execute the programme.[3]

The incidence of consumption of liquor in the district along with its concomitant aspects, illicit distillation and displacement of the licit liquor by the illicit, has been discussed in the chapter on Law, Order and Justice.

CHARITABLE ENDOWMENTS

A comprehensive list of 29 charitable endowments operating in the Hooghly district has been given in the Census 1951: District Handbook: Hooghly.[4] Confirmation was obtained in August, 1966 from the District Magistrate and the Chief Inspector of Secondary Education, West Bengal regarding their continued existence. The only change that has taken place meanwhile relates to the administration of the Prasanna Kumar Mitra Grant Fund which has been taken over by the Chief Inspector of Secondary Education from the Inspector of Schools, Burdwan Division.

Of this large number of charitable trusts, endowments and memorial funds, the Mohsin Fund and the B. L. Mukherji Trust are State-wide while the others are limited to the district. The list at pages 645-47 gives details of the more important amongst them.

NOTES

[1] Source: Deputy Labour Commissioner, West Bengal.
[2] Source: Special Officer, Tribal Welfare, Hooghly.
[3] Source: Commissioner of Excise, West Bengal.
[4] A. K. Mitra: Census 1951: District Handbook: Hooghly. Calcutta, 1952. pp. 51-3.

CHARITABLE TRUSTS, ENDOWMENTS AND MEMORIAL FUNDS

Name of the Fund	Year of origin	Object of the Fund	Amount donated	Investment	Annual Interest
			(Rs.)		(Rs.)
Uttarpara School Scholarship Fund (Administrator—D. M., Hooghly)	1879	Out of the surplus funds of the Uttarpara School a Fund was created to award prizes (Scholarships). Discontinuation of the said scholarships has been ordered by Government who is making necessary provisions for the maintenance of the school	Rs. 11,800. The present corpus is Rs. 54,800	Invested in G. P. Notes	—
Somra Durga Charan H.E. School Fund (Administrator—D.M., Hooghly)	1906	For the upkeep and improvement of the Somra Durga Charan H. E. School	Rs. 10,000	Invested in G. P. Notes 3½% loan of 1900-01	Rs. 342.12
Hooghly Bally bathing ghat and temple repairing Fund (Administrator—Collector, Hooghly)	1915	For the maintenance of the ghat	Rs. 5,000	3½% G. P. Notes	Rs. 212.75
Upendra Narayan Majumdar's Guptipara H. E. School Maintenance Fund	1917	For the maintenance of the school	Rs. 5,500 Rs. 1,000 Rs. 6,500	Invested in G. P. Notes	Rs. 226.75
Poor Mohamedan Aid Association Fund (Muslim Education Society Fund)	1921	The interest is to be paid to the Secretary to the Association	Rs. 4,000. The present corpus is Rs. 5,900	Ditto	—

CHARITABLE TRUSTS, ENDOWMENTS AND MEMORIAL FUNDS.—*contd.*

Name of the Fund	Year of origin	Object of the Fund	Amount donated	Investment	Annual Interest
			(Rs.)		(Rs.)
Ramnagar Atul Vidyalaya Charitable Endowment Fund (Managed by a Committee with Collector as President)	1922	Maintenance and upkeep of the Ramnagar Atul Vidyalaya	Rs. 54,000	The securities invested in G.P. Notes which are in custody of the Treasurer, Charitable Endowments, West Bengal	Rs. 1,616.00
Rakhal Ch. Pal Chatuspathi Trust Fund (Managed by a Committee with Collector as President)	1922	Maintenance of the Chatuspathi for the teaching and study of Sanskrit language	Rs. 25,500; unspent balance of interest Rs. 5,800. The present corpus — Rs. 31,300	Ditto	Rs. 936.62
Prasanna Kumar Mitra's Grant Fund (Administrator —originally Inspector of Schools, Burdwan Division, now the Chief Inspector, Secondary Education, West Bengal)	1922	The interest is to be spent as the schooling fee of a poor of Antpur H. E. School and for the maintenance of the School	Rs. 3,500	In G. P. Notes	Rs. 122.06
Sanat Kumar Staff Nurses Fund (Administrator— D. M., Hooghly)	1939	The income of the fund is to be utilized towards the maintenance of a staff of nurses in the Imambarah Hospital	Rs. 63.800 Rs. 7,000 Rs. 25.000 Rs. 10,000 Rs. 3,140.06 Rs. 4,000 Rs. 1,108.31. The present Corpus— Rs. 1,35,567	G. P. Notes Deposits in Banks	Annual income more than Rupees two thousand

CHARITABLE TRUSTS, ENDOWMENTS AND MEMORIAL FUNDS.—*concld.*

Name of the Fund	Year of origin	Object of the Fund	Amount donated	Investment	Annual Interest
Benode Behari Trust Fund (Sm. Binapani Dawn W/o late Kalipada Dawn is the Hony. Secy. and she is the administratrix of the Fund)	1949 under Govt. Notn. No. 1754 Edn. dated 21.4.49	The Chatuspathi named "Benode Chatuspathi" for the advancement of Sanskrit learning to be conducted by the said Fund. Cost of Ratha Jatra festival will be met from the income of the sum of Rs. 6,000. Income of the other sum of Rs. 10,000 will be spent for the improvement of the Girls' School, Boinchee	Rs. 51,000 Rs. 6,000 Rs. 10,000 Rs. 67,000	The securities invested in G. P. Notes which are in custody of the Treasurer, Charitable Endowments, West Bengal. The G. P. Notes are in custody of the Reserve Bank of India, Calcutta	Rs. 1,526.12 Rs. 179.50 Rs. 317.25
Maniklal Dutta Charitable Eye Infirmary	Not known	For the upkeep and maintenance of the eye infirmary attached to the Walsh Hospital, Serampore	Rs. 50,000	In G. P. Notes	—
Hooghly Public Library Fund (Collector is the Treasurer of the Fund)	Not known	The interest is intended to be used for the maintenance of a Public Library and reading room	Rs. 2,000 but the present corpus is Rs. 3,500	Invested in G.P. Notes	Rs. 122.00

CHAPTER XVI

PLACES OF INTEREST

ANTPUR—A village in Jangipara police station situated 3 km. (2 miles) north-northwest of Jangipara and lying on the Champadanga section of the Howrah-Amta Light Railway. It can also be reached *via* Haripal station, 45 km. (28 miles) from Howrah, on the Tarakeswar section of the Eastern Railway with which it is connected by a regular bus service plying between Haripal and Rasidpur *via* Antpur and Rajbalhat. Another approach, by road, is possible from Baidyabati (see Baidyabati) by travelling for 26 km. (16 miles) up to Haripal along the Baidyabati-Tarakeswar highway and then turning left along the Haripal-Rasidpur asphalt road, which passes through Antpur, some 13 km. (8 miles) away. It is said that the two adjacent villages Antpur and Anarbati were formerly known as Vishakhali where once resided two influential zemindars, Atar Khan and Anar Khan by name. Vishakhali was partitioned between them and the present villages Antpur and Anarbati took their names after Atar Khan and Anar Khan. According to the 1961 Census, the village has a population of 1,520 of whom 166 are educated or literate.

The Mitra family

The village has also been the seat of two important zemindar famililies of the district, namely the Mitras and the Ghoses. Kalidas Mitra, the legendary founder of the Mitra family, is supposed to have been one of the five Kayasthas accompanying the five Brahmins brought to Bengal from Kanauj (Kanyakubja) by Adisura. Kandarpanarayan Mitra, a scion of the family, held a high position under the Brahmin Raja of Bhursut who settled him with lands at Antpur. Krishnaram Mitra, the grandson of Kandarpanarayan and the most illustrious member of the family, was born in A.D. 1718 and rose to become the Dewan of Burdwan Raj under Maharaja Kirttichand. The enormous wealth amassed by him was mostly spent in philanthropy and the building of temples. He excavated 36 tanks within his zemindary to provide drinking water to his subjects. Near his residence at Antpur he erected several temples the most prominent of which is the one built in A.D. 1786 and dedicated to the family deity Radha-Gobinda. It is a large *atchala* structure with an attached *charchala mandap* in front known as the *jagamohan*, both placed on a high platform approached by stairs to its north and south. The outer walls of the

jagamohan and the exposed parts of the front wall of the main temple are embellished with exquisite terracotta panels representing episodes from the Epics and the Puranas and scenes of contemporary life and society. The inner walls of the *jagamohan* are similarly decorated with floral and vegetative motifs. Coloured mural paintings of geometric and other designs cover the vaulted interior of the roof of the *jagamohan*. It is said that the bricks of the building were made of Ganges silt and the mortars were mixed with Ganges water only. To the east and south-east of the main shrine stand the Dolmancha and Rasmancha of Radha-Gobinda and the temples of Gangadhara, Fulesvara, Ramesvara, Jalesvara and Banesvara, all variant names of Siva. The temples of Gangadhara and Ramesvara, built in 1751 and 1773 respectively, display on their facades terracotta plaques with floral and vegetative motifs.

Chandimandap

The *Chandimandap* (lit. pavilion of goddess Chandi) built by Krishnaram is another object of interest in the village. It is a rectangular hall with a thatched *dochala* roof supported by a wooden framework every member of which is profusely carved. The brackets are disposed in human forms, the vertical struts are elaborated to accommodate various divine figures, the beams are encased in wooden panels displaying floral designs and the tapering pillars carry elaborate carvings on their capitals. Nothing much now remains of the picturesque decorations of fine strips of coloured cane and peacocks' plumage which once covered the entire ceiling. The structure is one of the very few of its kind extant in West Bengal preserving the remnants of a forgotten artistry in wood.

The Ghose family

Related to the Mitras, the Ghose family has attained celebrity because of Baburam Ghose (popularly known as Swami Premananda), one of the direct disciples of Shri Ramakrishna Paramhamsa. It was at the village home of the Ghoses at Antpur—now a deserted house falling to ruins—that Naredranath Datta (later Swami Vivekananda) and eight other disciples of Sri Ramakrishna Deva took a vow of *Sannyasa* (renunciation of the worldly life) over a lighted fire on the night of December 24, 1886 which, incidentally, coincided with the Christmas Eve of that year. The philosophical significance of this event has been feelingly described by Romain Rolland in his book—Life of Ramakrishna. The hallowed spot where was born the prime idea motivating all subsequent activities of the Ramakrishna Order is now marked by an unpretentious marble plaque mentioning the date and time of the occurrence and the names of those who took the vow. The Ramakrishna-Premananda Ashram of Antpur holds an annual service here on the 24th of December to commemorate the event. This organization has also built a temple on the birth-place of Swami Premananda and runs a charitable dispensary in the village.

Sri Ramakrishna Paramhamsa and his consort Sri Ma Saradamani visited Antpur on occasions and some of their personal effects together

with an oil painting of the saint, claimed to be his first portrait, and the footprints of Saradamani Devi taken with lac-dye on a piece of cloth are still preserved by the Ghose family.

Anarbati

Anarbati, a village to the immediate south of Antpur is a place of Vaishnava pilgrimage since it is regarded as one of the *Dwadas Pats* (places associated with the twelve principal disciples of Sri Chaitanya) for its association with Parameswar Das Thakur who installed here an image of Syamsundar which can still be seen at the local Thakurbari. It is said that Sri Chaitanya once visited Anarbati to meet his beloved disciple.

ARAMBAGH SUBDIVISION—The westernmost subdivision of the district lying between 22°36′ and 22°2′ north latitude and 87°22′ and 88°1′ east longitude and separated from the rest of the district by the Damodar which forms its eastern boundary. It touches the Sadar and Kalna subdivisions of Burdwan district on the north, the Vishnupur subdivision of Bankura district on the north-west, the Sadar and Ghatal subdivisions of Midnapur district on the south-west and the Sadar and Uluberia subdivisions of Howrah district on the south. The present subdivision was formed in 1879 and in 1900 its name was changed from Jahanabad to Arambagh.

Geologically, its westernmost parts comprised in the Goghat police station are undulating and at a relatively higher level; but the rest of it, covered by the police stations of Arambagh, Khanakul and Pursura, consists of alluvial plains.

The Damodar, the Mundeswari and the Dwarakeswar-Rupnarayan are the principal rivers of the subdivision which have been adequately described in Chapter I.

The subdivision consists of Arambagh, Pursura, Khanakul and Goghat police stations and covers an area of 1,068.8 sq. km. (412.8 sq. miles). There are 533 mauzas spread over 1,049.4 sq. km. (405.3 sq. miles) while the township of Arambagh, the only urban region, accounts for an area of 19.4 sq. km. (7.5 sq. miles). According to the Census of 1961, the subdivision has a population of 5,08,015 persons of whom 4,91,464 live in villages and 16,551 in the town. Arambagh is the most sparsely populated subdivision in the district but within its boundaries density of population increases markedly from west to east—from 857 persons per sq. mile in Goghat to 1,154 in Arambagh, 1,560 in Khanakul and 1,904 in Pursura police stations. In the last-named thana, the population density exceeds that of the district taken as a whole. Members of the Scheduled Castes number 1,32,759 while the Scheduled Tribes are represented by 9,814 persons. The principal religion is Hinduism with 4,40,615 adherents (inclusive of Scheduled Castes) while Islam claims 67,277 persons within its fold.

The total number of literates (i.e., those who can read and write a simple letter in their mother tongue) and educated persons (i.e.,

those who have read up to the Primary standard in a school) enumerated together in the 1961 Census was 1,31,164. There are 4 degree colleges at Arambagh town, Kamarpukur, Bengai (both in Goghat P.S.) and Radhanagar (Khanakul P.S.). Of the several centres of Sanskrit learning which flourished in the subdivision in the past the most prominent was at Krishnanagar in Khanakul police station.

Agriculture is the principal occupation of the people of the subdivision, 1,01,319 persons depending on it according to the Census of 1961. There is no large-scale industry in the subdivision; modern industrial establishments consist of small engineering workshops, rice mills and husking machines while the mentionable cottage industries are handloom weaving and the brass and bell-metal craft. Important centres of handloom weaving are Gaurhati, Daspur, Helan, Atghara, Balipur, Ghosepur, Govindapur, Kishorepur, Kanakpur, Kedarpur, Syambazar, Badanganj, Hajipur, Mandaran and Kumarganj. Brass and bell-metal industries are located at Bali-Dewanganj, Seora, Manikpat and Khanakul. Persons engaged in small-scale industries and handicrafts number 12,761 while transport, storage and communications provide employment to 1,188 persons.

Garh Mandaran in Goghat P.S. is a place of great historical interest. Strategically situated on the Bengal-Orissa border, it played an important role in the military history of the region in mediaeval times. Ruins of a huge fort exist in the midst of a field and the remains of a building known as the Badsahi mosque and a tank called the Badsahi Dighi can be seen at Mayapur village. Fine specimens of mediaeval Bengali temple architecture are to be found at Gaurhati, Salehpur, Ramnagar, Bali-Dewanganj, Khanakul-Krishnanagar, Senhati, Rajhati, Srirampur, Kalimba, Kanpur, Hamirbati, Mayapur, Dihi Bayra and Arambagh town (Basudebpur and Parul).

Raja Rammohan Roy and Sri Ramakrishna Paramhamsa Deva—two illustrious sons of modern India—were born in Radhanagar (Khanakul P.S.) and Kamarpukur (Goghat P.S.) respectively. To perpetuate the memory of Raja Rammohan in his native village a library and a college have been established there. The Ramakrishna Math and Mission have built a temple on the birthplace of Sri Ramakrishna and a complex of educational institutions and guest houses at Kamarpukur. Arambagh Town—Headquarters of the subdivision of the same name, is situated in 22°53′ N and 87°47′ E on the river Dwarakeswar. The town is connected with Tarakeswar, the nearest railway station 29 km. (18 miles) away, by an all-weather asphalt road on which buses ply regularly. The road is bridged throughout except across the Mundeswari which is negotiated in winter and in summer over a temporary wooden bridge. During the rains, all transport has to be ferried from bank to bank at this point. Visitors, journeying from Calcutta in their own vehicles travel up to Baidyabati along the

Grand Trunk Road and then turn left and proceed to Arambagh *via* Tarakeswar.

Jahanabad, the previous name of the place, was changed to Arambagh in 1900 to avoid confusion with a town of the same name in the Gaya district of Bihar. Arambagh means the garden of ease and refers to the garden of the Miyans, the most influential family of the town in the early years of the present century. Arambagh was constituted into a municipality in 1886 and has an area of 19·4 sq. km. (7·5 sq. miles) of which one ward, Kalipur, lies to the west of the Dwarakeswar and the rest of the town to its east. A cement-concrete bridge has recently been built across the river connecting the two portions of the town. According to the Census of 1961 it has a population of 16,551 persons of whom 2,140 are educated and literate. As a subdivisional headquarters Arambagh has the usual complement of public offices besides two hospitals run by the Government. The only college of the town is situated at Kalipur.

Apparently an old place, Arambagh enjoyed some importance during the days of the Mughals owing to its situation on the Old Badsahi road from Burdwan to Midnapur. From a passage in Akbarnama[1] it is known that in A.D. 1590 Man Singh, then Governor of Bihar, intending to invade Orissa, marched through Burdwan to this place and cantoned his troops here till the end of the rains. No remains, however, have survived within the town, presumably on account of the encroachment of the river. A spot to the west of the Zila Parisad Inspection Bungalow marked by a modern masonry pile, is pointed out as the gate of Jagat Singh, son of Man Singh. Ruins of a building and an old tank at Mayapur, 8 km. (5 miles) east-south-east of the town, are still called the Badsahi *masjid* and the Badsahi *dighi*.

Owing to acute difficulties of access and lack of economic opportunities, this remote and unhealthy settlement could not prosper up to the middle of the present century. In 1931 the town had a population of only 7,461 which increased to 8,992 in 1941, 11,460 in 1951 and 16,551 in 1961. Arambagh is now within easy reach from Calcutta, Burdwan and Chinsura due to the tremendous development of road communications. It is touched by several important roads including the Old Benares Road, Old Nagpur Road and Arambagh-Burdwan road. Other minor roads connect it with the interior of the subdivision. The municipal roads have also been greatly improved, their total length at present being 29.2 km. (18.25 miles) of which 15.2 km. (9.5 miles) are metalled and 14 km. (8.75 miles) are unmetalled. But, in spite of its growing prosperity, a large part of the town retains its rural character. A part of the municipal area is still under regular cultivation and 1,565 persons living in the town were enumerated during the 1961 Census as agricultural workers.

In spite of the phenomenal development of communications and

its location within a rice growing area, Arambagh does not thrive as a mart for agricultural produce of the subdivision which is handled in bulk at Raina (Burdwan district) and at Champadanga and Tarakeswar (both in the Chandernagore subdivision). There is no large-scale industry in Arambagh; modern industrial establishments are represented by small engineering workshops and one rice mill. According to the 1961 Census, 716 persons are engaged in trade and commerce, 332 in transport, storage and communications, 684 in manufacturing other than household industry, 159 in household industry, 122 in mining, quarrying, livestock, forestry, fishing, hunting and plantations, orchards and allied activities while 1,246 persons are engaged in other services. It also appears from the same report that there are 903 agricultural labourers and 662 cultivators in the town who form the largest functional group, thus lending the economy of the town a strong agricultural bias.

Monuments

Arambagh town contains several good specimens of mediaeval Bengali temple architecture. The Siva and Raghunandan temples in the Basudebpur locality, built in 1726 and 1773 respectively, are decorated with fine terracotta plaques. Both are *atchala* shrines and are in a bad state of preservation The third temple of Basudebpur, a *pancharatna* structure in a ruinous state, also displays terracotta embellishments on the extant parts of the front wall. The temple of Bisalakshi in the Parul area, built in 1859, exhibits a wealth of excellent stucco incisions and terracotta ornaments. The deity, a manifestation of Sakti, is held in high esteem by the local people. Ranjit Roy, a big zemindar called a Raja by courtesy, worshipped Bisalakshi and built her present temple and excavated a large tank nearby, now known as Ranjit Roy's *dighi*. Pleased with his performance, the deity agreed to fulfil his prayer that she should be born as his daughter on the strict condition that she would leave if the Raja ever asked her to go away. Once on the day of the bathing festival of *Baruni*, when the Raja was otherwise very busy, the daughter asked for his permission to go and take a ceremonial bath. Absentmindedly, the Raja told her to go and she left at once never to return. Later in the day, he was told by a *sankhari* (dealer in conchshell jewellery) that a beautiful maiden had taken a pair of bangles from him on the bank of the *dighi* and had asked him to go to Ranjit Roy for the price. The Raja and the *sankhari* hurried to the spot only to find two delicate hands, wearing the bangles, rise above the water at the centre of the tank and disappear for ever. To this day, the bathing festival of *Baruni* is celebrated at Ranjit Roy's tank.

Vestiges of the moat that once encircled the stately residence of the Roys can still be seen in a village named Garbari on the north of the Old Benares Road about a mile east of Arambagh. An illustrious son of this family was Acharya Jogeschandra Roy Vidyanidhi whose biography has been included in the Bankura District Gazetteer.

Places of interest around Arambagh

Gaurhati is a large village situated about 11 km. (7 miles), as the crow flies, south-south-east of Arambagh with which it is connected by a metalled road about 13 km. (8 miles) long on which regular bus services ply. Formerly it was a very flourishing centre of cotton and silk weaving. Prosperous merchants of the place built several temples in the village of which the one dedicated to Gangadhar carries embellishments. The country road which branches off from the Arambagh-Gaurhati road near the G.T.S. pillar at Mobarakpur, 4 km. (2½ miles) from Arambagh, passes by the villages of Ramnagar and Salehpur, about 1½ km. (1 mile) and 2 km. (1½ miles) respectively from Mobarakpur. The *atchala Lakshmi-Janardan* temple of Ramnagar and the flat-roofed structure dedicated to *Khelaram Thakur* (*Dharma*) contain ornamental terracotta plaques on their facades. Similar embellishments also occur in the *atchala* temples of *Dharma* at Dihi Bayra, a village to the east of Arambagh town. Mayapur, situated on the north of the Old Benares Road, 9 km. (6 miles) to the east-south-east of Arambagh town, has a decorated terracotta temple of the *nabaratna* type. The Pagla Kali of Tirol, a village 8 km. (5 miles) to the north-northeast of Arambagh, is believed to possess the power of curing lunacy. The priests supply the patients or their relatives with iron bracelets which are supposed to heal the ailment. Ghar Goal, a village to the east of Arambagh town, is the birth place of Jnanchandra Ghose, the eminent scientist.

BAIDYABATI—A municipal town in Serampore police station situated in 22°47′ N and 88°20′ E, on the west bank of the Bhagirathi. It can be reached *via* Sheoraphuli and Baidyabati, stations on the main line of the Eastern Railway, at a distance of 22.4 km. (14 miles) and 24 km. (15 miles) respectively, from Howrah. Sheoraphuli is the junction for the Tarakeswar branch line. Baidyabati became a municipal town in 1869 and included Champdani up to 1917 when a separate municipality was constituted for the latter town. At present Baidyabati municipality has an area of 9.06 sq. km. (3.50 sq. miles), extending chiefly along the river bank, and a population (according to the 1961 Census) of 44,312 persons of whom 15,890 persons (35.9%) are educated and literate. During the decade 1951-61, the population of the town grew by 19,429 persons (78.08%) against the district's urban growth of 46.71% and the State's 35.97%. "In this part of the country population has not grown according to the space available but according to where it can find the means of sustenance. Any place showing any sign of prospect of livelihood and sustenance attracts people from outside. This trend is particularly marked in the narrow urban strip of Hooghly."[2]

Baidyabati was well known in mediaeval times as a centre of Sanskrit learning and places in and around it found frequent mention in old Bengali literature. It is the site of *Alaler Gharer Dulal*, written in 1858 by Pyarichand Mitra under the *nom-de-plume* of Tekchand

Thakur. The best known place in the town is the *Nimai Tirtha Ghat*, so named as Sri Chaitanya (who was addressed at home as Nimai) is said to have stopped and bathed here in the Bhagirathi on his way to Orissa. It also figures in the *Manasavijaya* of Bipradas Piplai (1495 A.D.) as a place where Chand Sadagar, the legendary merchant, found a *nim* tree with *champaka* blossoms on it. According to prevalent custom, devotees intending to pour holy waters of the Bhagirathi on the Taraknath *linga* at Tarakeswar fill their pitchers after a ceremonial bath here and walk all the way to Tarakeswar 37 km. (23 miles) north-west of Baidyabati, carrying the vessels suspended from the ends of a bamboo pole. O'Malley and Chakravarti inform,[3] "In the old maps a place is shown hereabouts under various names, *e.g.* Degoon in Bowrey's chart of 1688, Degon in the Pilot Chart of 1703, and Digum in Rennell's atlas with a flag denoting a police station. This has been identified by Yule with Dirghanga,[1] a village above Baidyabāti, from which a District Board road runs west to Singur. But, according to a Bengali poem of the 18th century, narrating the legend of Satyanārāyan, and in that connection the voyage of a merchant down the river Hooghly, the latter is said to have touched Degangā (below Chinsura), where *champaka* flower bloomed on the *nim* tree.[5] This is evidently the Nimāi-Tirtha Ghāt of Baidyabāti." Two large fairs are held here at the time of the *Baruni* (April) and *Paush-Samkranti* festivals (January).

Nimai Tirtha Ghat

Sheoraphuli

Sheoraphuli, once an insignificant village, rose to prominence as the seat of an influential zemindar family known as the Sheoraphuli Raj, a collateral branch of the Bansberia Raj family. On the division of *pargana* Arsha belonging to Sarkar Satgaon, a portion fell to one Manohar, the original founder of the Sheorapnuli house. "Among the descendants of Manohar, the best known was Harish Chandra Rai, who flourished in the beginning of the 19th century. The great *hat* at Sheoraphuli owes its origin to him and he also built the fine temple of Rāmchandra at Guptipārā. He specially patronized the worship of Jagannāth at Māhesh (Serampore). ... In course of time the estate became involved, and it was eventually purchased at an auction sale by the late Mahārājā Sir Jotindra Mohan Tagore and the Raja of Dighāpatiā (Rājshahi). The Sheoraphuli family is now in reduced circumstances."[6]

The famous *hat* of Sheoraphuli, now controlled by the Government, is a great mart for agricultural produce. The Nistarini Kali temple in Sheoraphuli Bazar, founded by Raja Harish Chandra, is visited by a large number of pilgrims throughout the year. The Gauranga temple in Doltala, Chaudhuripara—a *sikhara* shrine with an attached *Jagamohana*—is another important temple of Sheoraphuli. The Sarada Charan Museum has been described in Chapter XIII on Education and Culture.

BAINCHIGRAM—A large village in Pandua police station situated

about 9.6 km. (6 miles) north-northwest of Pandua and about 32 km. (20 miles) north-west of Chinsura. The main line of the Eastern Railway passes by the village and there is a station of the same name at a distance of 68 km. (42½ miles) from Howrah. The metalled road passing through the village and connecting it with the Boinchee railway station, branches off from the Grand Trunk Road at a point approximately 32 km. (20 miles) north-west of Chinsura. In 1961 the village had a population of 5,352 persons of whom 1,909 (35.6%) were educated and literate. Here are located a post office, two higher secondary schools, one for boys and the other for girls, a free library with about 1,500 volumes, a health centre, five rice mills and a daily market. The name of the village has possibly originated from that of a thorny plant producing small edible fruits like berries with which the place was once infested. The silted bed of a river lying across the village is said to be the channel along which the Behula river used to flow in the past. It may have been that branch of the Damodar shown in Van den Broucke's map (A.D. 1640) as falling into the Bhagirathi near Amboa (Kalna in Burdwan district). In his *Manasamangal*, Ketakadas Kshemananda (A.D. 1660) presumably mentions this channel as the Banka Damodar and places on its bank Narikeldanga and Baidyapur, both on the north-east of Bainchigram. Situated on the bank of this navigable river, Bainchigram was once a flourishing centre of trade and commerce.

Trading communities and their temples

The *Tambulibaniks* (traders in betel leaf etc.) are the earliest known settlers of the village whose mercantile enterprises brought it into prominence. A *sikhara* temple (locally known as the 'deul') built by one Gokul Singh of this community and dedicated to Gopal, dates back to A.D. 1582.* Standing in the compound of the boys' school in the Dakshinpara locality, it displays terracotta ornaments on the facade but is now abandoned and in a bad state of preservation. It appears from available information, archaeological and otherwise, that another trading caste, the *Gandhabaniks* (traders in spices, drugs, food grains etc.) flourished in this village since the early years of the 18th century. A number of temples left by the ancestors of the Kar, Dan and Datta families belonging to this community are still extant in the Purbapara, Uttarpara, Paschimpara and Dakshinpara areas of the village. Two of them, one in Purbapara and the other in Uttarpara, were built in 1727 and 1715 A.D. respectively while the others appear to have been set up some time in the same century. The shrines, mostly dedicated to Siva, are now in decay. Although their wealth and influence have considerably waned, the *Gandhabaniks* still retain their leadership in the village and form the largest caste group. Formerly the village had a large colony of braziers and

*H. H. Risley in his Tribes and Castes of Bengal. Vol. II (Calcutta, 1891), mentions of an inscription on the temple showing this date. The inscription is missing now.

the bell-metal utensils produced here were famous for durability and finish.

The Bose and Mukhopadhyaya families

The Boses and the Mukhopadhyayas, two influential zemindar families of the village, took active part in social reforms and the spread of education in the 19th century. The Bose family is known to have enthusiastically supported the widow remarriage movement of Pandit Iswar Chandra Vidyasagar. Thakurdas Mukhopadhyaya, the founder of the Mukhopadhyaya family, amassed great wealth in silk trade. His son Biharilal was a close friend of Vidyasagar who inaugurated a girls' school at Bainchigram in 1856. At the instance of Vidyasagar, Biharilal created a trust fund of Rs. 1,50,000 from the proceeds of which a free high school at Bainchigram and two charitable dispensaries, one at Bainchigram and the other at Tribeni, were set up and maintained. Recently, the Bainchigram dispensary has been converted into a health centre. Bhagvatacharya Nilakanta Goswami, a renowned Vaishnava scholar and an acknowledged authority in Vaishnava theology, was born in this village in 1847.

Festivals

The *Jhampan* of *Jagatgauri* or *Manasa* held in the Bengali month of *Jyaistha* (May-June) for three days, is the major festival of the village attended by a fair and display of fire-works. The *Ratha Jatra* festival of the Dan family and the *Abhaya Puja* of the *Gandhabaniks* are also of importance. The latter is the worship of *Durga* in her *Abhaya* form in which she is shown holding Srimanta Sadagar in her hands.

Boragarh

Boragarh, a village situated about 8 km. (5 miles) north-west of Bainchigram along the Grand Trunk Road, contains several temples of which the one dedicated to Gopal—a modest *atchala* structure with terracotta decorations on the facade and built in A.D. 1679—deserves mention.

BALAGARH—See Sripur.

BALI-DEWANGANJ—A large village in Goghat P.S. situated on the right bank of the Dwarakeswar 9.6 km. (6 miles) south of Arambagh town with which it is connected by the unmetalled Ghatal Road. To distinguish it from Bally in Howrah district it is commonly called Bali-Dewanganj combining it with a village of the latter name a mile to the south. In 1961 it had a population of 1,884 persons of whom 492 (26.1%) were literate and educated. The village contains a post office, a higher secondary school and a big library. Bali is a renowned centre for manufacture of brass utensils, especially pitchers, which are sold over a wide market including Calcutta. The industry is, however, declining due to difficulties of communication and supply of raw materials.

Temples

Wealthy merchants of the village built several temples in the Rautpara, Dalalpara and Palpara localities which are now in varying stages of preservation. The most important of the five temples in Rautpara is the one dedicated to Durga, a *jor-bangla* structure sur-

mounted by a *navaratna* tower and large terracotta figures composing a Durga panel on the facade. Ornamental terracotta plaques also appear on the front wall of the Sarbamangala temple of this group. Some of the terracotta figures on the facade of the dilapidated *pancharatna* temple in Dalalpara can easily be ranked with the best specimens of Bengal's temple terracotta art. The large, solidly built, terracotta figures of warriors, girls playing on musical instruments etc. set in very bold relief on the corners of the octagonal *ras-mancha* at Palpara measure 4 feet in height and, for their girth, have few parallels in West Bengal.

BALLABHPUR—See Serampore.

BANDEL—See Hooghly.

BANSBERIA—The northernmost municipal town of the district in Magra police station situated in 22° 58′ N and 88° 24′ E to the immediate north of Hooghly-Chinsura town and extending along the west bank of the Bhagirathi up to Tribeni. The town can be reached through two railway stations, namely Bansberia and Tribeni, on the Katwa branch of the Eastern Railway, situated on the 45th km. (28th mile) and on the 48th km. (30th mile) respectively from Howrah. The Hooghly-Kalna road passes through the town connecting it with the district headquarters. Bansberia municipality was established in 1869 and the present municipal limits cover an area of 9·07 sq. km. (3.50 sq. miles) inhabited, according to the 1961 Census, by 45,463 persons of whom 21,200 (46.6%) are educated and literate.

The establishment of the Dunlop Rubber Factory at Sahaganj, the Bone and Jute mills at Bansberia, the Tribeni Tissue and the Kesoram Rayon factories at Tribeni since the third decade of the present century has assisted the growth of the town considerably. In 1921 it had a population of 6,382 which increased to 14,221 in 1931, 23,716 in 1941, 30,622 in 1951 and 45,463 in 1961. The increase was mostly due to immigration of male labour as is indicated by the growth in the number of males from 9,797 in 1931 to 26,969 in 1961 and their large excess over females who in 1961 numbered only 18,494. In 1961, 11,528 persons were engaged in manufacturing other than household industry forming the largest functional group of the town. Traditional industries consist of brick making and the brass and bell-metal crafts.

Bansberia Raj

In 1656 Emperor Shah Jahan granted a *sanad* to one Raghab Datta-Ray of Patuli in Burdwan district conferring on him the title of 'Chowdhuri' and the zemindary of 21 *parganas* lying mostly in *Sarkar* Satgaon. For the management of his newly acquired property Raghab made Bansberia his headquarters. He cleared the place of the bamboo jungle with which it was overrun and built a large house in it. Rameswar, the son of Raghab, made Bansberia his permanent residence. As a reward for his services in attaching defaulting zemindaries and making assessments thereof, Emperor Aurangzeb gave

him *Panj Parcha* (five dresses of honour) and the hereditary title of *Raja Mahasaya* by a *sanad* dated A.D. 1679. In the same year, by another *sanad*, he was granted 401 *bighas* of rent-free land for his residence and a zemindary of twelve more *parganas* including present-day Calcutta. Rameswar built a palace encircled by a deep moat extending for about a mile. The palace was further protected by a thick fence of bamboo groves from which the name Bansberia (Bans= bamboo, beria=fenced) appears to have originated.

Rameswar peopled his village with Brahmins, Kayasthas, Baidyas, and other *Navasakha* castes belonging to various professions. He also established several *tols* and requisitioned the services of distinguished teachers from Banaras and Mithila. Ramsaran Tarkabagis, a noted scholar of Banaras was appointed as his *Sabha Pandit*. The credit of constructing in A.D. 1679 the finely carved brick temple of Ananta Basudev also goes to him. After his death some time before 1728 the estate was partitioned amongst his three sons, two nephews and a Brahmin dependant, the eldest son Raghudev getting the zemindary of Arsha etc. Manohar, one of the nephews, got the *taluk* of Boro and founded the Sheoraphuli Raj. Raghudev was a pious man who made large grants of rent-free lands to Brahmins. He once saved a Brahmin zemindar from suffering indignities by paying on his behalf the arrears of land revenue although it involved the risk of his facing the same ordeal himself. This act of benevolence earned for him the hereditary distinction of *Sudramani* (the jewel of the *Sudras*) from Murshid Quli Khan. The Bansberia and Sheoraphuli Raj families have accordingly been known as *Sudramani* Rajas. Raghudev was succeeded by Gobindadev who died without a son in 1740 and on this account the Rajas of Burdwan and Nadia, with the sanction of the Nawab, took possession of the bulk of the property of Bansberia Raj. Three months after Gobindadev's death his wife gave birth to a child who was named Nrisinghadev. By this time the family retained only one small *mauza*, Kulihandi, which even was appropriated by the British before the posthumous child attained manhood. Warren Hastings, the then Governor-General, however, directed that those of his ancestral properties that had not been taken over by the Burdwan Raj and were included in the 24 *parganas* granted to the English Government, should be restored to Nrisinghadev. Accordingly, he was given possession of nine *parganas* from A.D. 1779. He built a temple for the goddess Swayambhava (Kali) in Bansberia in 1788, the brick foundation of which is still visible to the adjacent north-west of the Hamseswari temple. A versatile man, Nrisinghadev spent seven years from 1792 to 1799 in Banaras where he devoted himself to Tantrik rites and started translating the *Kasi-khanda* into Bengali verse in collaboration with Jaynarayan Ghosal of Bhukailas and Jagannath Mukhopadhyaya. He also translated *Uddisa-tantra* into Bengali and prepared a map of Bengal for Warren

Hastings. On his return from Banaras in 1799 he started building a large temple in honour of Hamseswari, but died in 1802 before it could be finished. His wife, Rani Sankari, completed the work in 1814.

Although the history of the Bansberia Raj after Nrisinghadev is of no special interest, two scions of the family, viz. Raja Purnendudev and Kumar Munindradev Roy, deserve mention. Purnendudev was distinguished for his liberality and public spirit. He induced the East Indian Railway authorities to open the Trisbigha (now Adi Saptagram) station and bore a large part of the cost of metalling the feeder road leading up to it. He also contributed half the cost of metalling the Strand Road from Keota to Tribeni and maintained a charitable dispensary and kept up an old alms-house at Bansberia. The local school was founded by him in 1893. Munindradev, son of Purnendudev, was one of the foremost figures in the library movement of Bengal. He represented India in the second International Library Congress held in Spain in 1935.

Temples

The chief objects of archaeological interest are found within the Garhbati, i.e. the fort compound of the Bansberia zemindars. To the east and north-east of the modern palace are the temples of Ananta Vasudev and Hamseswari. The former, built in A.D. 1679, is an *ekaratna* shrine characterized by curved cornices and an octagonal tower. Its front, facing east, as also the two sides on the north and south are covered with terracotta panels, elaborately carved. The temple of Hamseswari is unique in construction; the superstructure is composed of thirteen turrets, each resembling a lotus bud and all graded along the vertical ascent. It is said that Nrisinghadev requisitioned the services of architects from Banaras for building this temple. The inner arrangements are said to follow the human anatomy with the staircases representing *Ida*, *Pingala*, *Susumna*, *Bajraksha* and *Chitrini*, the five vital nerves, and traversing the structure rising to five storeys and an approximate height of 90 feet. In the sanctum on the ground floor is installed the image of the presiding deity Hamseswari, built of *nim* wood and painted green. She is seated on a thousand-petalled lotus, the stalk of which rises from the navel of her consort Siva lying prostrate. This shrine is popularly adjudged as one of the finest in the district and is visited by a large number of pilgrims throughout the year.

Sanskrit learning

Raja Rameswar had initially brought a number of Sanskrit scholars to Bansberia from Banaras and Mithila. Under the patronage of Raghudev and Gobindadev, Bansberia rapidly developed into a seat of Sanskrit learning and became the greatest centre of *Nyaya* studies outside Nabadwip attracting pupils from all over the country. Rambhadra Siddhvanta, Atmaram Nyayalankar, Ramsankar Tarkabagis, Ramkisor Nyayapanchanan, Ramnath Bachaspati—to name only a few—were the leading *Nyaya* scholars of this centre. The reputation

of Bansberia as a seat of Sanskrit learning, however, began to decline from about the middle of the 19th century. Having inspected the *tols* of Bengal in 1891, Pandit Mahes Chandra Nyayaratna, Principal of the Sanskrit College, observed in his report—"Bansberia with twelve or fourteen *tols*, Bhadreswar with its ten and Gondalpara with its ten in 1818 (all according to Mr. Ward's enumeration as quoted on pages 40 and 41 of Adam's Report, Long's edition), have almost ceased to have any *tol*, there being one good *tol* now at Bansberia taught by Pandit Mahendranath Tarkapanchanan, and another (a nominal one) at Bhadreswar." The last of the *Nyaya* scholars of Bansberia was Srinath Tarkalankar with whose death in 1907 the tradition of *Nyaya* studies at this centre came to an end.

English education

The first English school in Bansberia was founded in 1843 by the Tattvabodhini Sabha led by Debendranath Tagore. It continued for about three years before it was closed down for financial stringency. The next English school, founded by Alexander Duff in 1846, could continue only up to 1878 as its evangelic activities became too unpopular with the local people. To assist in conversions to Christianity, a church was established at Bansberia about this time under a Bengali clergyman named Tarachand. It was the first church in Bengal to function under a Bengali minister.

Pratap Chandra Mazumdar

Pratap Chandra Mazumdar, a leading figure of the Brahmo Samaj and a close associate of Keshab Chandra Sen, was a native of Bansberia. Born in 1840, he joined the Brahmo Samaj in 1859 at the instance of Maharshi Debendranath Tagore. He travelled to Europe and America to propagate the ideals of the Brahmo Samaj and represented it in the Parliament of Religions held in Chicago in 1891. He edited the Indian Mirror for some time and founded the Society for the Higher Training of Young Men (now University Institute) in Calcutta. Some of his works are: Oriental Christ, The Spirit of God, The Heart Beats and *Keshab Chandrer Jibani* (biography of Keshab Chandra, in Bengali).

BHADRESWAR—A municipal town and the headquarters of the police station of the same name, situated in 22° 50′ N 88° 21′ E, on the west bank of the Bhagirathi. It can be approached *via* Bhadreswar and Mankundu stations on the main line of the Eastern Railway situated at a distance of 28.8 km. (18 miles) and 32 km. (20 miles) respectively from Howrah. The Grand Trunk Road also passes through the town providing road connexion with Calcutta and Chinsura, the latter being 8 km. (5 miles) to the north-north-east. Bhadreswar was formed into a municipality in 1869 and now covers an area of 6.47 sq. km. (2.50 sq. miles). It is practically a mill town housing a number of large industrial establishments.

At the 1961 Census the population of the town was returned at 35,489 which was, curiously, less than that of 1951 by 803 persons. The number of males, although considerably in excess of females,

also fell from 23,865 in 1951 to 21,188 in 1961. These unusual demographic phenomena in a thriving industrial town are hard to explain. In 1961 the workers numbered 13,643 of whom 9,838 were engaged in manufacturing other than household industries and educated and literate persons totalled 12,306 accounting for a literacy rate of 34.7% for the town.

Bhadreswar is an old place being mentioned in the *Manasavijaya* of Bipradas Piplai (A.D. 1495) and shown in the Pilot's chart of 1703 as Buddesy. In mediaeval times it was a renowned seat of Sanskrit learning, *Vyakarana* and *Nyaya* being the favourite subjects of study. Bhadreswar used to be a great mart in the past but the emergence of Sheoraphuli has reduced its importance. The temple of Bhadreswar *Siva* is largely frequented, chiefly by women. Three large fairs are held here on the occasion of *Siva Chaturddasi* (March), *Baruni* (April) and *Paush-Sankranti* (January). The place seems to have been named after the deity Bhadreswar.

Telinipara, Paikpara and Mankundu

Telinipara, Paikpara and Mankundu are important quarters of the town, the first being the place of residence of the Bandyopadhyayas, formerly an important zemindar family of the district who had built several temples including the famous shrine of *Annapurna* erected in A.D. 1801. They patronized Sanskrit learning and established a High English School at Telinipara. The temple of Rama-Sita at Paikpara, a notable structure, is a *navaratna* temple with terracotta decorations on the facade. Opposite Mankundu railway station there is a mental hospital which has been dealt with in Chapter XIV on Medical and Public Health Services.

CHAMPDANI—A municipal town in Bhadreswar police station immediately to the south of Bhadreswar town and approachable *via* Baidyabati station on the main line of the Eastern Railway 25 km. (15.6 miles) from Howrah. The Grand Trunk Road passing through the town connects it with Chandernagore, the subdivisional headquarters, and Chinsura, the district headquarters, lying at a distance of 6.4 km. (4 miles) and 11.2 km. (7 miles) respectively. Champdani municipality was carved out of Bhadreswar and Baidyabati in 1917. Formerly Champdani proper formed a part of Baidyabati town and Gaurhati, a quarter of Champdani town, was included within Bhadreswar. The municipality has an area of 6.47 sq. km. (2.50 sq. miles) with a thick concentration of jute and cotton mills and other factories. The population of the town has grown from 31,543 in 1951 to 42,129 in 1961, the bulk of the increase being due to immigration of factory hands as is indicated by the growth of males from 18,537 to 26,329 over this period and their large excess over females who in 1961 numbered only 15,800.

Champdani

Champdani appears to have been a place of importance as early as the 15th century since Bipradas Piplai mentions it in his *Manasavijaya* (A.D. 1495) while describing the voyage of merchant Chand.

It was bestowed by Mir Jafar to Colonel Coote (later Sir Eyre Coote, Commander-in-Chief in India).[7] The claim was recognized by Warren Hastings in spite of the protests of Sir Philip Francis. Coote resided here with his young wife.[8]

Gaurhati

Gaurhati, a quarter of the town, contains a T.B. Hospital established by the Hooghly District Tuberculosis Association. (It has been described in Chapter XIV on Medical and Public Health Services). The local temple of Bisalakshi is visited by many.

CHANDERNAGORE SUBDIVISION—The youngest subdivision of the district situated between the Sadar subdivision on the north and the Serampore subdivision on the south. Its eastern and western boundaries are formed by the Bhagirathi and the Damodar respectively. The subdivision covers a total area of 501.8 sq km. (193.5 sq. miles) and comprises five police stations, viz. Chandernagore, Bhadreswar, Singur, Haripal and Tarakeswar lying in a line from east to west. In October 1954 when the Government of India handed over Chandernagore, a former French colony, to the Government of West Bengal, the four northern police stations of Serampore subdivision were combined with it to form the new subdivision.

Topography

Topographically the land is a flat alluvial plain intersected by a number of sluggish rivers and streams. There is, however, a gentle slope from north and west towards south and east as is indicated by the fact that Bhadreswar, the easternmost police station, has a mean elevation of 18′5″ above sea-level against 36′5″ of Tarakeswar lying at the north-western extremity of the subdivision. Another topographic feature consists of the relatively high riparian strips and the extensive depressions in between them. The raised grounds, which are mostly natural levees locally known as *jangals*, are more or less occupied by villages while the depressions serve as cultivable lands, or if lower still, form vast marshes. The depressions receive the drainage of surrounding lands and following failures during the rains to discharge their contents through small channels into larger streams, waterlogging occurs and such marshy patches are to be seen almost throughout the whole of the subdivision.

Rivers

The Bhagirathi and the Damodar flowing approximately from north to south are the main rivers while the minor streams are mostly their distributaries of which the most important is the Kana Damodar which had once been the main channel of the Damodar. It enters the subdivision near Aknapur in Tarakeswar P.S. and leaves it down Dwarhatta in Haripal P.S. Earlier channels of the Damodar have a common name, the *Kananadi*, the principal among them being that which entering the subdivision near Alipur in Haripal P.S. forms almost a crescent before leaving it above Bainchipota in Singur P.S. The main branch of the Kananadi is the Kausiki, while another branch meets the Saraswati near Atisara in Singur P.S. The Ghia flows along the border of the subdivision for about 12 miles and meets the Kunti

near Nabapara in Singur police station. The Kunti has a very short course within the subdivision and joins the Saraswati above Bagdanga in Singur P.S. Another branch of the Kananadi enters the subdivision near Chandanpur railway station in Haripal P.S. and after a short run meets the Ghia above Sinhalpatan in Singur thana. The only channel connected with the Bhagirathi that flows through the subdivision is the Saraswati which enters the subdivision near Khalisani in Bhadreswar P.S. and flowing in a south-westerly course leaves it near Baruipara in the Singur police station.

Population statistics

Of the 193.5 sq. miles comprising the subdivision, rural tracts cover 181 sq. miles divided into 368 mauzas while urban areas consisting of Chandernagore, Bhadreswar, Champdani, Singur and Tarakeswar towns extend over 12.5 sq. miles. Chandernagore is under a municipal corporation while Bhadreswar and Champdani have municipalities. According to Census classification, Singur and Tarakeswar are non-municipal towns. According to the Census of 1961, the subdivision has a population of 4,88,049 of whom 3,26,883 live in villages and 1,61,166 in towns; 85,094 belong to the Scheduled Castes and 12,178 to Scheduled Tribes. Hinduism is the principal religion of the subdivision with 4,30,744 (including members of the Scheduled Castes) adherents (88.3%) while Islam, next in importance, has 55,538 followers (11.4%). According to the 1961 Census, Chandernagore town, comprising a police station, has the highest population density in the district with 17,991 persons per square mile while the same for the subdivision is next only to that of the Serampore subdivision. Population densities in Bhadreswar, Singur, Haripal and Tarakeswar police stations are 6,219, 2,260, 1,571 and 1,831 per sq. mile respectively. Literate and educated persons in the subdivision number 1,73,800 (35.6%) of whom 1,25,169 are males and 48,631 are females. There is a Government college at Chandernagore and a private college at Haripal. The Institut de Chandernagore is an academy for cultivating French language and culture and has a museum attached to it. A private institution for higher studies in Sanskrit has been established at Tarakeswar by the Tarakeswar Estate.

Agriculture & Industries

Agriculture is the principal occupation of the people of the subdivision, 67,339 persons earning their livelihood from agricultural pursuits. Rice, jute, potato and pulses are the major crops. The soil of the Tarakeswar police station is particularly rich for the growing of potatoes. Tarakeswar town, Champadanga and Singur are important marts of agricultural produce. Large-scale industries are concentrated in the mill towns of Bhadreswar and Champdani as also at Gondalpara. There are many cold storages at various places in Singur, Haripal and Tarakeswar police stations. Of the economically significant cottage and small-scale industries, handloom weaving is the most important, the weavers being concentrated in the police stations

of Haripal and Tarakeswar with some sprinkling of them in Bhadreswar and Singur thanas.

Communications

The subdivision is well served by railways and road communications. The main line and the Howrah-Burdwan Chord line of the Eastern Railway both pass through the subdivision while the Sheoraphuli-Tarakeswar branch lies mostly within it. The Champadanga section of the Howrah-Amta Light Railway serves the south-western part of the subdivision and terminates at Champadanga in Tarakeswar P.S. Road communications now extend even into the remotest parts of the subdivision.

Health services

Chandernagore subdivision is well-provided with health service institutions. The Ruplal Nandy Field Research Unit of the Chittaranjan National Cancer Research Centre at Chandernagore, the Rural Health Unit and Training Centre (also Demonstration Centre of the All-India Institute of Hygiene and Public Health, Calcutta) at Singur, the Mental Hospital at Mankundu and the T.B. Hospital at Gaurhati are the more important to name. There is also a big general hospital in Chandernagore town run by the State Government.

Monuments

Remains of ancient structures exist at Sinhalpatan in Singur P.S. which are popularly associated with Sinhabahu, the legendary father of Vijaya Singha who is believed to have set up the earliest Indian kingdom in Ceylon. Chandernagore town and places around it contain vestiges of French settlements and a fort. Specimens of mediaeval Bengali temple architecture are to be found in Chandernagore town, Bhadreswar town, Singur-Purusottampur, Haripal, Dwarhatta, Bhagabatipur, Bhandarhati, Shyampur, Jaynagar, Baligari and Tarakeswar.

Places of pilgrimage

The temple of *Taraknath* at Tarakeswar is a major place of pilgrimage of the Hindus in Eastern India. Of the four principal festivals of this deity, viz. *Gajan* falling on the *Chaitra Samkranti* day (April), *Siva Chaturdasi* held in *Phalgun* (February-March), *Sravani Utsab* solemnized in *Sravan* (July-August) and *Annakut Utsav* observed in *Karttik* (October-November), *Gajan* is the most important. The *Jagaddhatripuja* and *Ratha-Jatra* festivals of Chandernagore, occurring in *Agrahayana* (November-December) and *Ashar* (July) respectively attract a large number of visitors. The shrines of *Bhadreswar* Siva at Bhadreswar, *Loknath* Siva at Loknath and *Boraichandi* at Chandernagore are largely frequented.

CHANDERNAGORE—Headquarters of the subdivision of the same name situated immediately to the south of Chinsura in 22°52′ N and 88°52′ E. The Grand Trunk Road passes through the town, while the main line of the Eastern Railway touches it at the station of the same name. It covers an area of 9.66 sq. km. (3.73 sq. miles) and has a municipal corporation constituted in 1955. As a subdivisional town it contains the usual complement of public offices besides 38 primary schools, 8 high and higher secondary schools, 8

post offices, 21 libraries, a degree college, the Institut de Chandernagore (which has been described in Chapter XIII), a general hospital and the Ruplal Nandy Field Research Centre of the Chittaranjan National Cancer Research Centre, Calcutta. Of the industrial establishments located here, the foundry section and the jute mills of the General Industrial Society Ltd. at Gondalpara, the Sett Industries at Kalupara, the Subhas Brass Factory at Malpara and the pharmaceutical factory of Sakti Oushadhalaya are prominent.

Chandernagore is mainly a residential town the industrial area being contained within the Gondalpara locality. In 1961 it had a population of 67,105 persons (36,441 males and 30,664 females) or 34.5% more than what it was in 1951. About 10 per cent of the total population in 1961 were engaged in manufacturing other than household industries forming the largest occupational group of the town while 36,760 persons (54.7%) were educated and literate.

Origin of the name

The name of the place is derived either from *chandan* (sandal wood) of which there was reportedly a large trade here in the past or from *chandra* (moon) because of the crescent shaped bend of the Bhagirathi at the place. The latter version appears more probable.

Although Chandernagore has not been specifically referred to in any of the mediaeval Sanskrit or Bengali texts, Boro, a quarter of the town lying on the bank of the river, appears in *Manasamangal* of Bipradas Piplai (A.D. 1495) while *Digvijaya-prakasa*, a 16th century Sanskrit text, mentions Khalisani, now on the north of the town, as a very prosperous village (*Mahagrama*) ruled by a king who belonged to the *Dhivara* (fisherman) caste. *Kavikankan* Mukundaram Chakravarti (circa A.D. 1600) names Gondalpara, presently south-eastern part of the town, in connexion with the voyage of the merchant Dhanapati.

The French

According to the English factory records the first settlement of the French in Bengal was in the extreme north of modern Chandernagore, just south of Chinsura, where they built their factory probably in 1674. The Dutch dislodged them from this settlement but the reoccupation of Chandernagore by the French took place in 1696 on the strength of a *farman* granted by Aurangzeb permitting them to build a factory there. During the rebellion of Sobha Singh in 1696-97, they sought and obtained leave to erect protective walls around their factory. Thus came into existence Fort de Orleans at Chandernagore.[9] In 1701 Chandernagore was placed under the authority of Pondicherry. For many years French trade in Chandernagore did not prosper and Alexander Hamilton observed at the beginning of the 18th century that the French had a factory at Chandernagore with only a few families living near it.[10]

In 1731 Joseph Francoix Dupleix was appointed Intendant of Chandernagore, a post he held for ten years. "Chandernagore under his able government became the astonishment and envy of its neigh-

bours. Money poured in from every quarter. New and surprising sources of commercial wealth were opened and vast designs of wealth emanated from this one man, in whom the most unlimited confidence was placed. His measures enriched individuals, while his policy extended the reputation of his nation. Never perhaps did the glory of the French and their prosperity acquire a more extended field than in this colony on the bank of the Ganges."[11] According to Malleson: "From the period of its first occupation to the time when Dupleix assumed the Intendantship, Chandernagore had been regarded as a settlement of very minor importance. Starved by the parent Company in Paris, it had been unable, partly from want of means, and partly also from the want of enterprise on the part of the settlers, to carry on any large commercial operations.... To govern a settlement thus fallen into a state of passive and assenting decrepitude, Dupleix was deputed in 1731. ... He bought ships, freighted cargoes, opened communications with the interior, attracted native merchants to the town. Chandernagore soon felt the effect of her master's hand. ... He had not occupied the Intendantship for four years, when, in place of the half-dozen country-boats which, on his arrival, were lying unemployed at the landing-place, he had at sea thirty or forty ships, a number which increased before his departure to seventy-two, engaged in conveying the merchandise of Bengal to Surat, to Jedda, to Mocha, to Bussora, and to China. Nor did he neglect the inland trade. He established commercial relations with some of the principal cities in the interior, and even opened communications with Tibet. Under such a system, Chandernagore speedily recovered from its forlorn condition. From having been the most inconsiderable, it became, in a few years, the most important and flourishing of the European settlements in Bengal."[12]

After the departure of Dupleix on transfer to Pondicherry in 1741, the Maratha raids, the unsettled condition of the country, want of funds and lack of enterprise on the part of his successors, all combined to reduce the trade of the French in Bengal. After Sirajud-daula's occupation of Calcutta in June, 1756, both the Nawab and the English applied for help to the French who declined to side with any but offered to shelter the English in their fort. In December 1756 war was declared between France and England. Next month the Nawab concluded a treaty with the English, and on his way back past Chandernagore, granted the French a *parwana* with all the privileges allowed to the British and even offered them the town of Hooghly if they would side with him. The French took the money, but declined the alliance. The English believed, however, that they had a secret alliance with Siraj-ud-daula and resolved to crush the French before attacking the Nawab. On the 14th of March 1757 Clive began the siege of Chandernagore which capitulated after a brief defence on 23rd March. "The capture of Chandernagore was of immense

importance to the British both by clearing the way for the final settlement with the Nawab and also by providing them with a large supply of guns and ammunition; the loot alone is said to have been sold for £130,000."[13]

In 1765 Chandernagore was restored to the French in accordance with a treaty between Great Britain, France and Spain concluded at Paris in 1763 which stipulated that the French were "not to erect fortifications, or to keep troops, in any part of the Subah of Bengal."[14] Late in 1768 or early in 1769 the French developed bitter relations with the Nawab leading to a skirmish and the occupation of the town. In 1778, on the outbreak of war in Europe, the English again occupied Chandernagore but withdrew on conclusion of peace in 1783. "During the French Revolution the citizens of Chandernagore shared in the republican fervour of their countrymen. The Governor . . . was kept a captive for some time in spite of the demands made by Lord Cornwallis for his release. Eventually, it was decided to send the royalists in chains to the Isle of France, but Cornwallis stopped the brig on which they were shipped while on its way down the Hooghly and released the captives. According to another account, the Governor . . . withdrew to Calcutta and thence to Pondicherry. In June 1793, during the war following the revolution, Chandernagore was reoccupied by the English without opposition. . . .It was restored by the Treaty of Amiens in 1802, only to be seized again a few months later on the resumption of hostilities. It was then administered by the Judge-Magistrate of Hooghly, and was finally made over to the French in 1816, after having been almost uninterruptedly in British possession for 23 years. While under the British Government, Chandernagore, as well as Chinsura and Serampore, is said to have swarmed with receivers of stolen goods, cheats, swindlers and fraudulent pawnbrokers. When Bishop Heber visited it in 1823, 'the streets presented a remarkable picture of solitude and desolation' and the Bishop saw 'no boats loading or unloading at the quay, no porters with burdens in the streets, no carts, no market people, and in fact only a small native bazar and a few dismal-looking European shops'."[15]

French administration

Since 1816 Chandernagore as an administrative unit, was placed under Pondicherry, the headquarters of French India, the local Administrator being appointed by the Governor at Pondicherry. The municipality of Chandernagore, constituted in 1880, used to have a Municipal Council presided over by a Mayor. There was besides a Local Council consisting of eight members entrusted with the management of certain local affairs. In the General Council of French India at Pondicherry, Chandernagore was represented by four members.

French Chandernagore was always a safe resort for the political workers of British India fighting for the independence of their country.

It thus became an active centre of revolutionary activities an account of which, with special reference to the role of Prabartak Sangha, has been given in Chapters II and XV.

Demand for freedom of Chandernagore was first mooted in a meeting of the Municipal Council on September 10, 1946. But there was no movement to translate it into action. On May 6, 1947 a memorandum was sent to the authorities demanding complete independence of French India. A representative organization called *Mukti Parisad* was formed which demanded the inclusion of Chandernagore in the Indian Union. In a decree issued on June 30, 1947 the French Government agreed to transfer all powers to an Administrative Council elected through adult franchise except those relating to judiciary, police, military and treasury. Pending the elections, an *ad hoc* Administrative Council was formed with the representatives of Chandernagore in the General Council and three representatives the Municipal Council to which the aforesaid powers were transferred on August 15, 1947. But this failed to satisfy the people who continued to agitate for complete independence. The French Government then declared Chandernagore a 'free town' under French sovereignty and increased the powers of the Administrative Council. The management of municipal affairs was vested with the new Administrative Council and the Municipal Council including the post of the Mayor was abolished. A new body called the Government Council was formed at Pondicherry to run the French administration in India, the Administrator of Chandernagore was also replaced by an officer called the Delegate of the Government Council, and the Assembly Municipal, took over the functions of the Administrative Council. An *ad hoc* Assembly was formed on the basis of adult franchise on November 27, 1947. The elections were held on July 25 and August 1, 1948 and the first session of the new Assembly was held on August 14, 1948. But none of these measures finally settled the future of the town which remained uncertain. At last in a referendum held on June 19, 1949, 99% of the voters elected for union with India. On April 18, 1950 an agreement was concluded at Calcutta between the French and Indian Governments in accordance with which the last French Administrator and Delegate of the Commissioner of the Republic for French India transferred the colony to the Administrator appointed by the Government of India on May 2, 1950 thus ending about 250 years' French occupation of the town.

Places of interest

Nothing remains now of the earliest French settlement at Tautkhana or of the Fort de Orleans situated near Laldighi. The churches, the convent, and the residence of the French Administrator along the strand are interesting buildings left by the French. The most renowned temple of the town is the shrine of Borai Chandi at Boro locality which is frequented by many throughout the year. The large *Navaratna* temple at Goswami Ghat known as *Kone Bouer Mandir*

was built by Gourmani Dasi in 1808. The Prabartak Sangha has recently renovated it and installed the symbol of the Sangha in the sanctum. The temple of Nandadulal with a *Dochala* porch, one of the finest of its kind in West Bengal, stands in the Lalbagan locality and was built by Dewan Indranarayan Chowdhury in 1739.

Trade, commerce & industry

Chandernagore flourished as a centre of trade, commerce and industry under the French regime. Cotton textiles known as *Farasdanga* (*Farashi*=the French; *danga*=land) products enjoyed wide reputation and constituted the major part of the export. Other important items of trade were rice, lac, indigo, spices and sandal. The largest rice market of the town was located at Lakshmiganj which is still a big rice mart. Of the many Indian merchants who settled here the most renowned in the 18th century was Indranarayan Chowdhury, as the Dewan of the French Government, who amassed great wealth also as an independent merchant. In the 19th century a number of factories producing lac, cigar, liquor and indigo were established at Chandernagore.

Education and culture

Formerly Gondalpara, a quarter of Chandernagore, was a centre of Sanskrit learning. During the French regime, Christian missionaries established several schools here for the spread of Bengali and French education. In 1861 the Sisters of St. Joseph of Cluny founded the St. Joseph's Convent for girls and in the following year Father M. Barthet of the Freres de Saint Esprit established a school called Ecole de Sainte Marie. The latter institution was taken over by the French government who re-named it Ecole de Garcons. After the opening of F.A. classes in 1893, it came to be known as College Dupleix in 1901. Between 1908 and 1931, the college wing of the institution remained closed after which the school wing was renamed Kanailal Vidyamandir after the renowned martyr Kanailal Datta. The college wing was re-established in 1931 under the name Cours d'Intermediaire Franco-Anglise and was affiliated to the Calcutta University. In 1947 it was upgraded to a degree college. With the merger of Chandernagore with India, it was taken over by the State Government and named Chandernagore College which is affiliated to the Burdwan University since 1961. Besides morning classes for girls up to the degree standard in Arts and day classes for boys in Arts, Science and Commerce, the special feature of the institution is that it teaches French up to the Honours standard. The modern educational and cultural institutions of the town have been discussed in chapters XIII and XV.

Since the middle of the 18th century a number of exponents of *Kavi*-song flourished at Chandernagore of whom Rasu Roy, his brother Nrisinha Roy, and Nityananda Bairagi were the most renowned. An article on the *Kavi* poets and music composers of the district has been appended to Chapter XIII.

Fairs and festivals

The most important festival of Chandernagore is Jagaddhatri *puja* observed for four days in the month of November. Very large images of the goddess, which with their stelac measure 25 feet or more in height, are fashioned in traditional style and are elaborately decorated with solapith embellishments (*daker saj*). About 30 deities are now worshipped at different localities of the town, most of them on a community basis. Vast crowds all over the district and beyond visit Chandernagore during the first three days of the *puja*, their number increasing to a lakh or more on the last day when the images are paraded through the city streets with great pomp and grandeur before immersion in the Bhagirathi. The *Rathajatra* of Jagannath held in the month of *Ashad* (June-July), *Sri Khuntir Utsav* performed at the Goswami Ghat in *Agrahayana* (November-December) and *Patbhanga* ceremony observed in front of the temple of Borai Chandi in *Chaitra* (March-April) are other important festivals. Fairs are held at Kundu Ghat in the Boro locality and at Khalisani on the occasion of *Doljatra* in the month of *Falgun* (February-March) and near Helapukur during *Rasjatra* in the month of *Kartik* (October-November).

DASGHARA—A village in Dhaniakhali P.S. situated approximately 8 km. (5 miles) west of Dhaniakhali and approachable by an all-weather asphalt road which connects it with the thana headquarters as also with Chinsura, some 38 km. (24 miles) away. The Burdwan-Tarakeswar highway meets the former road here and connects it with Tarakeswar, the nearest railway station, 13 km. (8 miles) from Dasghara. The junction of two important thoroughfares makes the place an important point of road communication. Although there is a separate *mauza* called Dasghara, the name is loosely applied to a number of neighbouring villages, viz. Srikrishnapur, Rajendrabati, Ghanasyampur, Jot Hamid, Haidarganj, Dasghara and Dighir

Legend has it that the area was once ruled by the Baraduari Rajas whose capital was divided into ten quarters giving rise to its present name Dasghara. Nothing definite is known about these kings but the remains of a fortress, a palace, some temples and a tank called *Bisalakshir pukur* at a place known as Baraduari are popularly attributed to this royal house.

The Biswas family, the most influential zemindar family of this region, was founded by Jagamohan Biswas whose father was a close associate of Advaita Acharya, a senior contemporary of Sri Chaitanya. Jagamohan is said to have settled at Dasghara at the instance of Ramnarayan Pal Chowdhury of the Baraduari Raj family. His son Rammohan was a man of means and influence. His numerous acts of charity earned for him the leadership of the Dasghara society which pre-eminence was retained by his descendants for long. They patronized Sanskrit and Islamic learning, established temples and organized festivals which still play a part in the public life of the area. The *pancharatna* temple of Gopinath built by Sadananda Biswas in A.D.

1729 and standing within the precincts of the residence of the Biswas family is remarkable for the excellent terracotta embellishments decorating its facade. The *Rathajatra* of Radha Govinda, initiated by the Biswas family, is the principal festival of Dasghara. An interesting feature of the ceremony is that the *Ultarath* (the return journey) does not take place on the eighth day after the *Rathajatra* but a day later. The festival is attended by a fair attracting huge crowds from far and near.

Under the patronage of the Biswas family, Dasghara once flourished as a centre of learning. There were several *tols* and a *madrasahs* here. Mangovinda Biswas, a scion of the family, introduced English education in the area in 1858 by converting the *madrasah* into a High English school which is still in existence.

Bipin Krishna Roy was an eminent person of Srikrishnapur. Born in 1851, he became one of the leading stevedores of Calcutta and amassed a fortune a large part of which was spent in munificence. He established a charitable dispensary here which is now run by the Zilla Parishad.

Formerly, Sahbazar, a village near Dasghara, was an important centre of hand-made paper industry. Of late, a centre for producing hand-made paper has been started at Dighir which turns out only blotting papers at present.

DHANIAKHALI—Headquarters of the police station of the same name and situated 32 km. (20 miles) west-northwest of Chinsura with which it is connected by regular bus services plying on an all-weather asphalt road. Belmuri is the nearest railway station on the Howrah-Burdwan Chord line 8 km. (5 miles) east of Dhaniakhali. A junction of several roads, the village can also be reached from Haripal railway station on the Tarakeswar line along a 16 km. (10 miles) long metalled road terminating at Dhaniakhali. Another metalled road connects it with Bainchi in Pandua P.S. In the 1961 Census, the population of the village was returned as 1,645 of whom 493 (30%) were educated and literate. Here are located the local Block Development Office, a school for boys and girls, a post office, a hospital, a collection and chilling centre under the Greater Calcutta Milk Supply Scheme.

Situated in the midst of an old handloom weaving area with a cross-country road from Salimabad (now in Burdwan district) to Hooghly passing by it, as shown in Valentyn's map published in 1725, Dhaniakhali had become a flourishing centre of trade and commerce in the 18th century, probably earlier. From Rennell's Atlas, Plate VII (1779), it appears that several roads met here while a highway connecting Salkia (now a part of Howrah town) with Salimabad passed through it. In the middle of the 18th century the East India Company had a large *aurung* or weaving factory at 'Dooneacolly'. In Rennell's Atlas 'Deneacolly' is shown with flag mark indicating a police station.

Although Dhaniakhali is famous for handloom weaving, the village itself has no big concentration of textile weavers. Products of a larger area, which includes the neighbouring villages, pass off as the merchandise of Dhaniakhali and are highly prized for their attractive colours, fine texture and durability.

Bhandarhati

Bhandarhati, a large and prosperous village 6 km. (4 miles) south of Dhaniakhali along the Dhaniakhali-Haripal road, is the place of residence of the Chaudhuris, an important zemindar family of the district. The thick cluster of large buildings of *Subarna-baniks* (gold and silver merchants) in the *Baniapara* locality testify that the place was formerly a thriving centre of trade and commerce. It was also a seat of Sanskrit learning; many manuscripts recovered from here are preserved in the Sanskrit College Library, Calcutta.

Khankrakuli

About 3 km. (2 miles) south-west of Dhaniakhali is the village Khankrakuli containing a remarkable temple displaying rich terracotta decorations on the facade.

DWARBASINI—A large and ancient village in Pandua P.S. on the left bank of the derelict Kedarmati river situated 10 km. (6 miles), as the crow flies, south-west of Pandua. The village can be reached along a country road, 3 km. (2 miles) long, branching off from the Magra-Khanpur metalled road at a point 18 km. (11 miles) from Magra which is the nearest railway station for Dwarbasini. Of its population of 2,952 persons (according to the 1961 Census), 721 (24.4%) are educated and literate. The village contains a post office, a Higher Secondary school and a hospital. Export of sand over the Bengal Provincial Railway used to be the major trade of the place which has declined with the abolition of the railway. The village was once a big centre of indigo plantation and remains of a large *nil-kuthi* (indigo factory) can still be seen in the Dakshinpara locality. Formerly, the *Subarna-baniks* (gold and silver merchants) of Dwarbasini were a prosperous community.

Although no inscription or ancient structure has yet been discovered at Dwarbasini, its antiquity is established by a number of sculptures discovered from various spots in the village and assignable to the Pala-Sena period* when Mahanad, Tribeni and Saptagram were thriving settlements in the vicinity. Nothing, however, is known of the political history of Dwarbasini or of the rulers who then held sway over this region. According to a prevalent legend Dwarbasini was the capital of a kingdom ruled by certain Pala Rajas of the Sadgop caste. A different version of the story avers that these princes came from a collateral branch of the famous Pala dynasty. The slightly raised mound at Dakshinpara known as the *garh* (fort), the remains of brick houses, many filled up wells seen all over the village, and the tanks called *Kamana* (prayer-fulfilling), *Papaharan* (sin-removing),

*Most of these sculptures are now preserved in the Asutosh Museum of Indian Art, Calcutta.

Jibat Kunda (life-giving) and *Chandrakup* (well of the moon) are believed to be the vestiges of the capital of the Pala kings. A piece of waste land containing four tanks and known as *Sat Satiner Para* apparently derived its name from the seven wives of a Pala Raja each of whom was allotted a palace with a tank in this area. It is said that the kingdom of Dwara Pala, the last of the Dwarbasini kings, was invaded by a Muslim general named Muhammad Ali who could not conquer it on the first attempt. Within the palace enclosure was a tank called Jibat Kunda the waters of which had the miraculous power of curing the wounded and even restoring the dead to life. A Muslim saint named Shah Jokai, under the pretext of bathing in it with the permission of Dwara Pala, entered the water with a piece of beef concealed in his garments and thus polluted the tank and destroyed its supernatural powers. In the following battle Dwara Pala being totally defeated died with his family on a funeral pile within the palace which was reduced to heaps of ruins, now known as *Dhan Pota*, meaning a place where treasures are buried.

The *jhampan* of Bishahari, a variant name of Manasa, held on the Naga Panchami day in the Bengali month of *Jyaishtha* (May-June) is the principal festival of the village attended by a week-long fair attracting vast crowds from far and near. The *mela*, held in front of the temple of Bishahari by the Kedarmati river is visited by snake charmers and gypsies whose daring performances with various kinds of snakes form the most interesting feature of the fair.

DWARHATTA—A village in Haripal police station situated about 5.6 km. (3½ miles), as the crow flies, south-southwest of Haripal, the nearest railway station. It can be reached from Haripal along an all-weather metalled road on which regular bus services ply. In 1961 the village had a population of 1,770 persons of whom 658 (37%) were educated and literate. The village contains a Higher Secondary school, a public library and a post office.

Dwarhatta is the place of residence of the Sinha Roys, a family of zemindars belonging to the *Chhatri* caste, whose ancestors built several shrines here including the temple of Rajarajeswara (A.D. 1719) and the second temple of Dwarikachandi (A.D. 1764) which display excellent terracotta ornamentations on their facades. Formerly, Dwarhatta was a reputed centre of handloom weaving and the East India Company had an *aurung* here in the middle of the 18th century. It was also a centre of indigo plantation. Ruins of a *nil-kuthi* (indigo factory) are still to be seen in the village. In 1845 when the district was first divided into subidivisions, Dwarhatta became the headquarters of the southernmost of them, yielding the position later to Serampore.

FURFURA—A place of Muslim pilgrimage in Jangipara police station situated 6 km. (4 miles) east of the thana headquarters. It can be reached from Seakhala, the terminus of the Seakhala branch of the

Howrah-Amta Light Railway, along a 5 km. (3 miles) long metalled road. In 1961 the village had a population of 2,588 persons of whom 578 (22.3%) were educated and literate. Here are located a post office, a library and a rural health centre.

It is said that prior to the advent of the Muslims the place was known as Baghandi and was ruled by Hindu Rajas of the Bagdi caste whose fort stood at a place now known as Rajar Garh. In the middle of the 14th century Shah Safi, the conqueror of Pandua (Hooghly), sent a detachment under Shah Hossain Bokhari to capture Baghandi. Bokhari defeated the Raja and annexed his territory. A story similar to the one mentioned in the article on Dwarbasini is also told about the events leading to the fall of the Raja. Casualties on the Muslim side included four Rahaman brothers who came to be revered as *Sahids* (martyrs to the cause of Islam). The *mahzar* containing their graves at a place called Ganje Lohada is the chief object of interest here and is regarded as a very sacred spot by Muslims. Bokhari settled down at Furfura with his men and his tomb still exists within an enclosed compound in the Belpara locality. Many high-born Muslims, recipients of rent-free *ayma* land grants, also set up their abodes in and around the village. The local *Asrafs* are said to be the descendants of these *aymadars*. During the period of Muslim rule, Furfura developed into a centre of Islamic learning and culture sanctified by the memory of numerous saints and scholars. Many tombs built on the graves of *pirs* and *aulias* are still to be found in the village. The annual *mahfil* ceremony held in the Bengali month of *Phalgun* (February-March) is the principal festival of the village attended by many devotees and *alemas* (religious leaders). The festival was started in A.D. 1900 at the instance of a local *pir* named Maulana Muhammad Abubakar Siddiki.

Molla Simla

Molla Simla, a village near Furfura, contains an old mosque and the tomb of Hazrat Muhammad Kabir Sahib, popularly called Shah Anwar Kuli of Aleppo. The tomb is venerated by Hindus and Muslims alike.

GARH MANDARAN—The site of a large mediaeval fort, now in ruins, in the Goghat police station, situated 11 km. (7 miles), as the crow flies, west-southwest of Arambagh town from where it can be reached along an all-weather metalled road meeting the Old Nagpur Road at a point 11 km. (7 miles) away from Arambagh, near the village Kanthali, 2 km. north of Garh Mandaran. The Burdwan-Midnapur road passes west of the place and is joined by a local road at Rangamati on the immediate west of Mandaran. The name Mandaran is probably derived from *mandara*, a celestial tree, and *abani*, a tract. According to Beames, a local pundit derived the name from *manda* (bad) and *aranya* (forest).

The ruins

The ruins of the fort in the midst of a vast field consist of an earthen rampart enclosing a roughly quadrangular area in the middle of which

is another bulwark running around an almost circular space containing a high mound in the centre. The river Amodar enters the fortified area at the north-west corner of the outer fortifications, flows past the northern side of the mound and leaves the fort through a gap in the south-eastern part of the outer ramp. It is said that the outer rampart was once provided with four gateways at Rangamati on the west, Sainta on the south, Betbani on the east and Jatrasiddhi on the north. The area lying between the inner and outer protective walls contains vestiges of old fortifications on the southern side while the rest of it is now mostly under cultivation or used as grazing grounds. The central mound overlooking the Amodar and locally known as the *darbar* or court, stands to a height of about 40 feet and shows traces of a wall built of laterite slabs at the base and bricks above. Although the sides of the mound are now overgrown with jungle except for a narrow path leading to the top, it appears that many buildings once existed here. In the open space at the top lies a terraced structure identified as the tomb of Ismail Ghazi, which rises in two stages, the lower one being made of brick while the upper portion has bricks below and laterite slabs above. On the second terrace is the tomb itself, some six feet long and three feet high, known as the *Bara Astana* and is frequented by local Muslims. On the east of the mound, across the river, there is another tomb known as the *Chhota Astana*. "The situation (of the fort) is well chosen for defence against an enemy armed only with bows and arrows or even early firearms. Even if the outer ramp were taken, the garrison of the inner fort was sure of a water-supply from a river, which does not run dry in the hot weather."[14] The romantic site of this fort is the scene of the Bengali novel *Durgesnandini* (the Chieftain's Daughter) by the celebrated novelist Bankim Chandra Chatterjee.

History

Historically, Mandaran is a place of great interest. It has been identified by some with Apara-Mandara which, according to the testimony of *Ramacharita* by Sandhyakara Nandi, was under the rule of Lakshmisura who had joined Ramapala in his expedition against Varendri. In the mediaeval period it was an important frontier outpost between Bengal and Orissa and commanding, as it did, the Old Padishahi Road from Burdwan to Orissa *via* Saptagram, it figured prominently in the battles between the two kingdoms. The history of Mandaran during the mediaeval period has been elaborately dealt with in Chapter II and needs no repetition here. The importance of the place at that time is clear from the fact that it was one of the few places shown in the maps of Gastaldi, De Barros and Blaev. In the last decade of the 16th century Mandaran finally came under Mughal control and it figures in the *Ain-i-Akabri* as the headquarters of the *Sarkar* of the name which comprised sixteen *mahals*. *Haveli-i-Mandaran* (suburban district of Mandaran including the headquarters) was a large *mahal* with a revenue of 17,27,077 *dams* (Rs.

43,127). With the subjugation of the Pathans in Orissa, its importance gradually declined and by the second half of the 17th century it disappeared from the European maps.

Ismail Ghazi

According to a prevalent legend the fort was built by Ismail Ghazi, a general of Husain Shah of Gaur. While returning from Orissa after subduing the Hindus, Ismail halted at Mandaran. One night, while saying his prayers, he was disturbed by a noise above caused by celestial beings who were passing eastwards to bathe in the Bhagirathi. He ordered them to construct an immense fort at Mandaran which they promptly did within one night. News reached Husain Shah that Ismail was preparing for revolt whereupon he summoned the general to Gaur and had him executed. The decapitated body of Ismail mounted a horse and rode back to Mandaran being followed by the severed head. Arriving at the gate of the fort Ismail's body asked the guards to give him a *pan* (betel leaf) which they failed to do as the head was high up in the sky. The headless rider then came to a spot within the fort, ordered the earth to open and disappeared in the yawning abyss, the head returning to Gaur where it was buried. A different version of the story says that the head made its journey to Kantaduar in Rangpur district (now in East Pakistan) and was buried there. The present tomb of Ismail on the top of the mound within the fort is said to have been built by Sobha Singh of Barda to celebrate his victory against the Raja of Burdwan.

Places of interest around Garh Mandaran

"About two miles south-east of Mandaran is a village named Dinanath.* Two large gateways are visible here leading to an enclosure extending over 8 or 10 *bighas* According to tradition, the enclosure was a military bazar on the old Orissa road. Both the gateways have Persian inscriptions. That on the southern gateway speaks of the place being called *Mubarak Manzal* by order of Nawab Asad Jang (Nawab Shuja-ud-din of the historians) when he encamped here on his way from Orissa to Bengal in 1136 H. (A.D. 1723-24); while that on the northern gateway records the erection of a *sarai* by Mutamin-ul-Mulk (i.e., Shuja-ud-din) in 1143 H. (A.D. 1730-31).[17] It was here that Shuja-ud-din was informed of his appointment as Nawab of Bengal, and the gateways were apparently erected in commemoration of the good news."[18]

About 2 km. north-northeast of Garh Mandaran is the village of Kanthali. It contains a small thatched hut enshrining the emblem of Saileswara Siva. Legends associate the deity with the Hindu chieftains of Garh Mandaran. It is said that there was an underground tunnel connecting the former temple of Saileswara with the palace inside the Garh Mandaran fort. The *lingam*, which is believed to be *swayambhu* (self-grown), appears to be a part of an octagonal shaft of a pillar. The festival of *Basi Charak* held on the first day of the

*The place is now known as Sanbandhi—Ed.

Bengali month of *Baisakh* (April) is the principal religious event of the village. The *Basi Charak* of Rangamati, a village to the west of Garh Mandaran, is the biggest festival of the area. Paschimpara, a village 3 km. west of Garh Mandaran, is the birth place of Khelaram Chakravarti who composed one of the several versions of the mediaeval ballad known as Dharmamangal. Manik Ganguli, another Dharmamangal poet was born in Beldiha 8 km. (5 miles) west-northwest of Garh Mandaran.

GOSWAMI MALIPARA—A village in Dadpur police station situated 4 km. (2½ miles) north-east of the thana headquarters and approachable by bus from Chinsura, the nearest railway station, along an asphalt road up to Sanihati (19 km.—12 miles) and then turning right to follow a non-metalled country road passing by the village. In 1961 the village had a population of 2,278 persons of whom 637 (28%) were educated and literate. It contains a Higher Secondary school, a post office and a charitable dispensary.

According to local tradition the name Malipara (*Mali*—gardener; *para*—settlement) stemmed from the fact that the original settlers of the village were the gardeners of Raja Dwarapala of Dwarbasini who had his flower garden here; the prefix Goswami was added later due to the sizable population of Vaishnavas using the surname Goswami living here. The original Vaishnavas appear to have settled in the village in A.D. 1515 when Sri Bhagavan Acharyya (otherwise known as *Khanjan* or *Khanja* Bhagavan Acharyya), a close associate of Sri Chaitanya Deva, chose the place for his residence,[19] whereupon it came to be regarded as a *Sripat* (place of birth or residence of a leading Vaishnava). The locality where Bhagavan Acharyya and his intimate associate Chandrasekhar Acharyya lived is still known as *Acharyyapara*. Bhagavan Acharyya's descendants exercised considerable influence over the Vaishnavas of the neighbourhood and were held in high esteem by them. They installed several deities and built temples for them including the shrines of Madangopal (which also contains an image of Radhaballabh) and Radhakanta built by Sripad Krishnadas Goswami and Sripad Ballabh Goswami respectively. An eminent scholar in Vaishnava scriptures, Krishnadas received ample recognition from Srijib Goswami who bestowed on him the title of *Bhagavatananda* for his proficiency in *Srimadbhagavata*. Another renowned scholar of the Goswami family was Gourgopal Tarkalankar who was the *Sabhapandit* of the Maharaja of Burdwan.

Among the festivals of the village, the *Doljatra* of Gopinath in the month of *Phalgun* (February-March) and the annual *Annapurnapuja* are worth mentioning. Besides, *mahotsabs* are celebrated to commemorate the demise of prominent Goswamis of the place.

anihati

Sanihati (popularly known as Sinet), a small village on the Chinsura-Dhaniakhali Road 19 km. (12 miles) from Chinsura, contains the *jor-bangla* temple of Bisalakshi, a female *Shakta* deity, built

in A.D. 1822 (?). Despite renovations and crude application of pink lime-wash, the facade still preserves ornamental terracotta plaques. The deity, a huge two-armed goddess, is held in high esteem by the people of the surrounding area and her shrine attracts devotees throughout the year. Her annual festival held in the month of *Aswin* (September-October) is the most important religious event of the village. A large fair is held on this occasion. In the month of *Phalgun* (February-March) peasants assemble in the precincts of the temple with newly harvested rice and cook it there and partake of it after it has been offered to the deity. This unsophisticated ritual is known as *Ranna Utsab* (cooking festival).

Amarpur: Taraknath Palit

Sir Taraknath Palit, known for his charity, was a native of Amarpur, a village 14 km. (9 miles) east-southeast of Sanihati along the main road to Chinsura. Born in 1831, he rose to become one of the leading lawyers of Calcutta and donated a huge amount to the Calcutta University for promotion of teaching and research in science. The Science College building on Acharya Prafulla Chandra Road, Calcutta, was built from the funds provided by him His father Kalikinkar Palit founded a free school in his native village in 1837 to impart English education to local students. He also contributed generously to the fund raised for the construction of the Chinsura-Dhaniakhali road.

Babnan

A large village, mainly inhabited by Muslims, 5 km. (3 miles) south-southwest of Sanihati with which it is connected by an unmetalled country road. It is an important centre of the *chikan* embroidery handicraft which has been dealt with in Chapter V on Industries.

GUPTIPARA—An old and prosperous village in Balagarh police station in the extreme north-east of the district, situated 7.2 km. (4½ miles), as the crow flies, north-northwest of Balagarh. It can be approached along a mile-long metalled road from the railway station of the same name on the Bandel-Barharwa Loop Line (popularly known as the Katwa line) of the Eastern Railway, 35 km. (22 miles) north of Bandel junction. Regular bus services also ply between Bandel and Guptipara. In 1961 the village had a population of 848 persons of whom 455 (54%) were educated and literate. There are two Higher Secondary schools, one Sanskrit school, two libraries and a post office here.

It appears from available records, both textual and genealogical, that by the last quarter of the 16th century Guptipara had become a flourishing settlement of Brahmins and the *Baidyas* (physician caste of Bengal) who still form the *elite* of the place. It occurs in the list of places mentioned by *Kabikankan* Mukundaram Chakravarti in the *Dhanapati Upakhyan* of his *Chandimangal* (*circa* 1600) in connexion with the voyage of *Dhanapati*, the sea-faring merchant, along the Bhagirathi. According to the testimony of *Chandraprabha*, composed by Bharat Mallik in A.D. 1673, Guptipara had a sizable settlement of

Baidyas, while a passage in the *Tirthamangal* (1770) of Bijayaram Sen testifies to the scholastic renown of the Brahmins of the place. 'Guptapara' is shown in the map of Stavorinus (*circa* 1770) but on the other (left) bank of the river. The cartographer must have placed the village on the wrong side, for all the Bengali authors including Mukundaram Chakravarti are unanimous in locating it on the right bank. According to popular belief the people of Guptipara were once well known for their wit and its women for the art of hairdressing.

Sanskrit learning

The long and glorious tradition of scholarship of the *Rarhiya* and *Baidik* Brahmins of Guptipara made it a very important centre of Sanskrit learning in mediaeval Bengal. Since the end of the 16th or the beginning of the 17th century, the *Sobhakar, Bandya, Chiranjib* (*Bhattacharyya*), *Chitalchatta* and *Baidik* families had maintained *tols* to which students flocked from all over the country to study *Nyaya, Vedanta, Smriti* and *Darsana*. Some of the pundits of Guptipara were honoured in distant parts of India. Satabadhan Bhattacharyya, who flourished in the 17th century, was the *Sabhapandit* (court scholar) of the Raja of Indurakhi in eastern Gwalior. His only known work *Ramaprakasa*, a text on Smriti or Hindu Law, was written in A.D. 1647. His son Chiranjib was a professor in Varanasi and the author of *Vidvanmodatarangini*, a highly reputed work on Hindu philosophy. Descendants of Chiranjib were also noted for their scholarship. Equally renowned was the *Sobhakar* family to which belonged the poets Vishnu and Mathures and the celebrated scholar Baneswar Vidyalamkar. Mathures who lived in the 17th century also bore the title Vidyalamkar and was a famous *Tantrik*. He composed *Syamakalpalatika* in A.D. 1672. Baneswar flourished in the middle of the 18th century. Well versed in *Nyaya* and *Smriti* and known for his poetic genius, Baneswar was successively attached to the courts of the Maharaja of Burdwan, Maharaja Krishnachandra of Nadia and Raja Nabakrishna Dev of Sobhabazar (Calcutta). He was one of the eleven pundits commissioned by Warren Hastings in 1773 to codify the Hindu Law and after two years of hard work Baneswar and his colleagues brought out the compilation under the name *Bibadarnabasetu* which was translated into English by Halhed in 1775. He took a leading part in the discourse on *Nyaya* held in the court of Raja Nabakrishna. His poetic works are, *Chitrachampu, Devistotram* and *Turastotram*.[20] Descendants of Baneswar were also reputed for their erudition. In 1846 Rev. J. Long observed that Guptipara had 15 *tols* and many pundits were studying *Nyaya* there.[21] The last renowned *Nyaya* scholar of Guptipara was Gangadhar Nyayaratna (1813-1886).[22]

intriks

The *Birachara* form of *Tantrik* rites was once widely practised by the Brahmins and *Baidyas* of Guptipara. Of the reputed *Tantriks* who were born here mention may be made of Mathures Vidyalamkar, Baneswar Vidyalamkar and Ramgopal Agambagis.

Baidyas

The *Baidyas* of Guptipara have always been very prosperous. Ancestors of the Roy, Mazumdar and Sarkar families held high positions under the Nawabs of Bengal. Some of them were zemindars while others gathered enormous wealth in business.

The Guptipara *math*

The Guptipara *math* is said to have been founded by one Satyadeva Saraswati, a monk belonging to the *Dasanami* sect of *Saivas*, in the second half of the 16th century. A native of South India, Satyadeva selected Guptipara as his place of residence and established the *math* with Brindabanchandra, a variant name of Krishna, as the presiding deity. His disciple, Bisweswar Roy, a high revenue official under Emperor Akbar, bequeathed all his property to this religous institution. It appears that since its inception, the Guptipara monastery became a centre of the *Dasanami Saivas* under a *Mohanta* (abbot) appointed to the office from time to time. Tarakeswar being the chief centre of the *Dasanamis* in the district, the Guptipara *math* is subordinate to that at Tarakeswar but the abbot of Guptipara functions as a member of the *Mandali* (assembly) composed of the *Mohantas* of the *Dasanami* institutions at Garh Bhabanipur, Chaipath, Bhotbagan, Nayangarh, Baidyabati, Santoshpur and Guptipara under the leadership of the *Mohanta* of Tarakeswar. It is curious that while all the deities worshipped in the Guptipara *math* bear Vaishnava identity, the institution is run by the *Dasanamis* who belong to the *Saiva* sect.

Temples

The chief objects of interest in the village is the group of temples attached to the *math*. Ranged round a quadrangle enclosed by a high compound wall and placed on a basement terrace about 5½ feet high are the temples of Brindavanchandra on the north, Krishnachandra on the west, Ramachandra on the east, and the shrine of Chaitanya standing to the west of the Brindavanchandra temple. The oldest of the group is the temple of Shri Chaitanya belonging, architecturally, to the *jor-bangla* variety of the *chala* type of temples. "According to a note in the records of a local Pandit, the temple was built by Biseswar Rai in the reign of Akbar,"[23] and, therefore, in the last half of the 16th or the early years of the 17th century. This claim to antiquity is supported by the archaic appearance of the structure and the style and character of the terracotta ornamentation above the arches on the western wall. The temple enshrines wooden images of Shri Chaitanya and Nityananda, the two great Vaishnava preachers of Bengal. The finest of the group is the temple dedicated to Ramachandra. Belonging to the *ekaratna* variety of *ratna* temples, the structure has a slightly curved roof surmounted by an octagonal tower, the access to which is had by a flight of stairs. The whole of the facade and parts of the southern wall are covered with exquisite terracotta panels depicting figures of gods and goddesses and scenes from the Epics and the *Puranas*, mostly Vaishnavite. Although the temple is said to have been built by Raja Harischandra Roy of

Sheoraphuli during the time of *Mohanta* Sadananda Roy Dandisvami (1822-1829),[24] it may not be wrong, on a stylistic evaluation of the terracotta embellishments to assign it to early 18th century. Within the sanctum are the sitting images of Ramchandra, Sita and Lakshmana and a standing figure of Hanumana, all made of wood. Opposite is the large *atchala* temple of Krishnachandra said to have been built by *Mohanta* Dandi Madhusudanananda who was in charge of the *math* during Nawab Alivardi Khan's rule. The Dandi fell into arrears of revenue upon which the Nawab summoned Brindavanchandra (in whose name the properties of the *math* were held) to Murshidabad. Madhusudanananda fearing desecration of the deity made a duplicate image and carried it to Murshidabad. The Nawab realizing his mistake remitted the arrears and allowed the image to be taken back and Madhusudanananda installed it under the name Krishnachandra in the present temple. The temple of Brindavanchandra is the largest of the group and stands to a height of about 60 feet. Built in the first quarter of the 19th century by Nayan Chand Mallik of Calcutta, the *atchala* temple enshrines the images of Brindavanchandra and Radhika and of the ancillary deities Krishna, Subhadra and Balarama. The *math* attracts pilgrims from various parts of the country. The shrines of Deskalimata and Raghunatha, a little distance away are also largely frequented by local people.

Festivals

The *Rathajatra* of Jagannatha occurring in the Bengali month of *Asadh* (June-July) is the most important festival of Guptipara attracting large crowds. The wooden *ratha* used on this occasion has 13 towers and is about 40 feet in height. Another important festival is the *Snanjatra* (bathing ceremony) of Jagannatha. Formerly, because of the Tantrik tradition of the place, the annual worship of goddess Kali used to be celebrated with great splendour. The practice of community worship, now common all over West Bengal, seems to have originated in Guptipara. In 1759 a number of local Brahmins formed an association to celebrate the *Jagaddhatri Puja*. They elected a committee of twelve persons who collected subscriptions from the public and supervised the function. Being conducted by *baro* or twelve persons, this new practice of community worship came to be known as *Baroari Puja*.

GURAP—A large village in Dhaniakhali P.S. situated 8 km. (5 miles) north-northeast of the thana headquarters with which it is connected by a metalled road. The village can also be reached from the railway station of the same name on the Howrah-Burdwan Chord line of the Eastern Railway. In 1961 it had a population of 4,129 persons of whom 1,430 (34.6%) were educated and literate. Here are located two primary schools, one Higher Secondary school, a library, a post office and a daily market.

The village has several temples which constitute the chief attraction of the place. The *atchala* shrine of Nandadulal built in the

middle of the 18th century is decorated with specimens of terracotta art. Similar ornamentation also covers the front walls of two small Siva temples near by. The shrine containing the emblem of Gaureswara Siva, supposedly *swayambhu* (self-grown), is largely frequented, particularly by those suffering from wounds and gangrenes, as the sanctified oil available here is believed to possess curative properties. The *gajan* of Gaureswara held in the month of *Chaitra* (March-April) is a major festival of the village. Gurap is the native place of the famous Bengali novelist and short-story writer Prabhat Kumar Mukhopadhyaya and of Swami Bisuddhananda, the eighth President of the Ramakrishna Math and Mission. Prabhat Kumar was born in 1872 and was a barrister by profession. He edited the well-known Bengali monthly *Manasi O Marmmabani* (now defunct) for some time. Of his works *Ratnadeep, Ramasundari, Sindur Kouta, Shorasi, Nabakatha, Desi O Bilati* and *Patrapuspa* may be mentioned.

Bhastara

Bhastara, an old village to the immediate east of Gurap, yielded several sculptures assignable to the Pala-Sena period which are now preserved in the Asutosh Museum of Indian Art, Calcutta. It is the place of residence of the Sinhas, a renowned zemindar family of the district, founded by Krishnapran Sinha who held a high position in the Burdwan Raj. He was a man of charitable disposition who established a community kitchen to feed the distressed during the great famine of 1770. Chhakuram Sinha, a worthy descendant of Krishnapran, purchased the profitable estate of Bhastara from the Maharaja of Burdwan, excavated several tanks, built the 37 km. (23 miles) long Tribeni-Bhastara road, partly financed the construction of the Chinsura-Dhaniakhali road and of certain bridges at Saptagram. He is also known to have renovated the *ghat* (flight of stairs leading to the water) at Tribeni and the temple of Benimadhab at that place. His son Jagneswar was also known for his benevolence. He earned the friendship of Pandit Iswar Chandra Vidyasagar at whose instance he founded a school at Bhastara in 1853. He rendered substantial assistance to the suffering people of the locality during the famine of 1874.

HARIPAL—An ancient and prosperous village in the police station of the same name situated 1.6 km. (1 mile) south of the Haripal railway station on the Tarakeswar branch of the Eastern Railway, with which it is connected by an all-weather metalled road. An asphalt road from Dhaniakhali runs to the Haripal railway station crossing the highway from Baidyabati to Tarakeswar at a point 25.6 km. (16 miles) west-northwest of Baidyabati. In 1961 the village had a population of 1,772 persons of whom 943 (53.2%) were educated and literate. It has two libraries, a Higher Secondary school, a school for training female primary teachers and a post office. Of the two libraries, the *Kailaschandra Sadharan Pathagar*, established in 1921 and having about 3,500 books in English and Bengali, deserves

special mention. Cotton handloom weaving of the place has a long tradition.

History: ancient period

According to the testimony of *Digvijayaprakasa*, a mediaeval text assigned to *circa* 1600, the settlement of Haripal came into existence under Raja Haripal (legendarily belonging to a collateral branch of the famous Pala dynasty), who named the place after his own, peopled it with high-born and degraded Brahmins, as also by weavers and other artisans and converted it into a flourishing city provided with tanks and markets. This king is said to be identical with Raja Haripal of the *Dharmamangal* whose daughter Kanara married Lausen, the hero of the story. The legend relates that the king of Gaur sent his able general Lausen to punish king Haripal who had turned down the former's proposal to marry his daughter. This was because Kanara had taken a vow to marry that person alone who would cut up an iron rhinoceros with one stroke of his sword. In the battle that ensued the defending army was led by the princess herself but she was defeated. The victorious general Lausen then severed the rhinoceros which the old king of Gaur could not do and married Kanara. Although Raja Haripal is still remembered as the founder of the place, there are no old remains, except the local deity Bishalakshi which can be associated with him.

Mediaeval period

The factual history of Haripal can be traced back to the middle of the 17th century on the basis of an inscription on the Radha Govinda temple in the Raypara locality which testifies to the construction of the structure in A.D. 1654. If the genealogical records of the local Ray family are to be trusted, the founder of the family had settled down here during the reign of Akbar or soon after, i.e. in the second half of the 16th or the early years of the 17th century. Being mentioned in Rennell's Atlas, plate vii (A.D. 1779), Haripal seems to have been a place of considerable importance in the second half of the 18th century when the East India Company set up a large aurung or weaving factory there. In 1790 the Company moved its Commercial Residency from Rajbalhat to Haripal and kept it up there till 1835 for purchase of cotton fabrics of local origin.

Temples

The most interesting monument of the village is the temple of Radha Govinda in the Raypara locality built in A.D. 1654 (1576 Sakavda). It is a large *atchala* structure displaying terracotta ornamentations on two sides. A little to the south is a group of seven temples with a certain amount of terracotta decorations on them.

The Ray Family

The Ray family of Haripal is among the oldest and most renowned families of the district. It rose into prominence at the time of Sivadas Ray (Mazumdar) who served the Mughal government and obtained the title of Ray from Emperor Akbar. He built a commodious house at Haripal, excavated several large tanks in and around the place and made liberal grants of land to many scholars and Brahmins. The *Kulin Kayasthas* made him a *Gosthipati* or a leader of the sect. His

seven sons also served the Mughal government and received extensive grants of rent-free lands. The members of the family are credited with the construction of several temples including the one dedicated to Radha Govinda.

Bhagabatipur

Bhagabatipur, a village 5.6 km. (3½ miles) north of Haripal along the road to Dhaniakhali, contains a row of five Siva temples, now in a ruinous condition, but the one in the centre contains interesting terracotta plaques.

Paniseola

To the immediate south-west of Bhagabatipur is the village of Paniseola, the native place of the famous Mitra family to which belonged Pyarichand Mitra, Kisorichand Mitra and Saradacharan Mitra. Born in 1814 and author of several books, Pyarichand is best known for his Bengali novel *Alaler Gharer Dulal*, written under the nom-de-plume 'Tekchand Thakur' and published in 1858. In the contemporary Bengali world of letters dominated by a Sanskritic style of expression, it was a very bold and successful attempt to upgrade the colloquial language to the literary plane. The book was translated into English in the Journal of the National Indian Association by Narendranath Mitra in 1882-83 under the name "The Spoilt Boy".[35] In 1893 G. D. Oswell brought out a fresh English translation of it known as "The Spoilt Child: A Tale of Hindu Domestic Life."[36] Of the rest of his works *Abhedi*, a novel, *Mad Khawa Bara Day Jat Rakhar Ki Upay*, a satire, *Krishipath*, a study of agriculture, *David Hare-er Jiban Charit*, a biography of David Hare, and Life of Dewan Ramcomal Sen (in English), deserved special mention. Pyarichand's brother Kisorichand (1822-1873) was a reputed journalist and social worker. His best known work is the Life of Dwarakanath Tagore. Born in 1848, Saradacharan Mitra was a lawyer who later became a judge of the Calcutta High Court. He wrote a book on the land laws of Bengal.

Kaikala

Chandranath Basu, a well-known Bengali author of the 19th century was born in 1840 at Kaikala, a village 2.4 km. (1½ miles) north-west of Haripal. His works on literature and social reforms include *Sakuntala Tattva, Hindu Bibaha, Tridhara, Bangla Sahityer Prakriti, Savitri Tattva* and *Kah Panthah*.

Bandipur

Bandipur, a village 4 km. (2½ miles) north-east of Haripal is the birth place of Satischandra Mukhopadhyaya (1865-1948). He published the nationalist magazine Dawn (1897-1913) and founded the Dawn Society, an important political association of the time. He was a prominent leader of the swadesi movement of 1905 and established in 1906 the Bengal National College and School in collaboration with Gurudas Bandyopadhyaya, Brojendranath Seal and others. In 1910 this institution was amalgamated with the Bengal Technical Institute and later developed into the Jadavpur University.

Location and composition

HOOGHLY SUBDIVISION—The headquarters (Sadar) subdivision of the district lying between 22°52′ and 23°14′ north latitude and 87°58′ and 88°30′ east longitude. Almost triangular in shape, its base

rests on the Chandernagore subdivision to the south while it adjoins the Kalna and Sadar subdivisions of the Burdwan district on the north and north-west. The Bhagirathi and the Damodar form its eastern and western boundaries. Comprising the police stations of Chinsura, Magra, Balagarh, Pandua, Polba, Dadpur and Dhaniakhali, it is the largest subdivision of the district covering the whole of its northern portion and has an area of 1,155.4 square km. (446.1 sq. miles).

Physical features

The soil, formed by the siltation of the Bhagirathi on the east and the Damodar on the west, is alluvial with a slight rise towards the north and north-west. In spite of its being intersected by numerous channels, creeks and irrigation channels excavated mostly along the depressions (the remains of former river beds), extensive areas become water-logged during the rains. The Bhagirathi and the Damodar are the principal rivers of the subdivision, the minor rivers being mostly their old channels or branches and tributaries.

Rural and urban areas

Of the 1,155.4 sq. km. (446.1 sq. miles) of the subdivision, rural areas, divided into 778 mauzas, extend over 1,126.9 sq. km. (435.1 sq. miles) while urban areas cover only 28.5 sq. km. (11.0 sq. miles). There are two municipal towns in the subdivision, viz. Hooghly-Chinsura and Bansberia, the former being the headquarters of the district. The only non-municipal town is Pandua.

Population and people

According to the 1961 Census the subdivision has a population of 6,62,043 persons of whom 5,25,317 live in villages and 1,36,726 in towns. Persons belonging to the Scheduled Castes and Scheduled Tribes number 1,56,100 and 60,480 respectively. Hinduism is the principal religion of the subdivision having 5,75,046 followers (including the members of Scheduled Castes) while Islam is professed by 85,625 persons.

Density of population

The reports of the 1961 Census, show that the subdivision has a very high density of population, especially along the industrialized riverine belt within the Chinsura and Magra police stations in which the density far exceeds the average density of the district. In Chinsura P.S. 7,427 persons, on an average, inhabit one square mile of area, the corresponding figure for Magra P.S. being 3,299. The density of population in the other police stations ranges from 1,295 in Dhaniakhali P.S. to 1,036 in Polba and Dadpur thanas, both of which are below the district average.

Education

In 1961 the number of educated and literate persons in the subdivision was 2,22,579 of whom 1,50,560 (67.6%) were males and 72,019 (32.4%) females. There are four degree colleges, two at Chinsura of which one is for boys and the other for girls, one at Itachuna (Pandua P.S.) and another at Baghati (Magra P.S.). The only polytechnic is located at Hooghly.

Agriculture and industry

With 1,26,695 persons depending on it for their living, agriculture is the principal occupation of the people of the subdivision. Rice, jute

and potatoes are the main agricultural produce. The *char* lands by the Bhagirathi, particularly in Balagarh thana, produce excellent *rabi* crops. Many cold storages, which are installations ancillary to agriculture, exist at various places of Dhaniakhali, Magra and Pandua police stations. The subdivision has a great tradition for cotton handloom weaving. The pieces turned out at Dhaniakhali, Ghanarajpur, Mahmudpur, Purba-Kalikapur, Paisa, Mirzanagar, Banna, Ichhapur, Gopinathpur, Gurap, Ala, Somaspur, Inathnagar and other villages in Dhaniakhali P.S. are commonly known as Dhaniakhali products and they enjoy a high reputation for their texture and durability. Sprinklings of cotton weavers are also to be found in Balagarh, Pandua and Chinsura police stations. *Chikan* embroidery work is a specialized handicaraft of Babnan (Dadpur P.S.) and a few neighbouring villages. Large-scale industries are chiefly concentrated in the Magra P.S., the Bandel thermal power station, Dunlop Rubber Co., Kesoram Rayons and Tribeni Tissues being the establishments worth mentioning.

Transport and communication

The subdivision is well served by railways and road transport. The Howrah-Burdwan Chord line, the main line and the Bandel-Barharwa Loop line of the Eastern Railway, pass through it serving its western, central and northern portions. The Grand Trunk Road runs through the heart of the subdivision while a number of all-weather metalled roads, mostly provided with bus services, and numerous *cutcha* roads extend into its remotest parts.

Health services

There is a big general hospital, a police hospital and a jail hospital at Chinsura maintained by the Government. Government veterinary hospitals exist at Chinsura, Dwarbasini and Balagarh. The Railways run a maternity and child-welfare centre and a health unit at Kodalia. Another hospital situated at the local refugee colony is run by the Bansberia municipality. Besides, there are Government health centres and charitable dispensaries in the rural areas.

Monuments

Ancient ruins and old monuments occur at Mahanad, Saptagram, Pandua and Tribeni. Remains of very old structures and the temple of Jateswarnath are the objects of interest at Mahanad. The Saptagram ruins consist of a few tombs and broken mosques. The *Bais Darwaja* mosque, a tall minar and other Muslim structures exist at Pandua. The tomb of Jafar Khan Ghazi and an adjacent mosque are the chief archaeological objects at Tribeni. The Portuguese church at Bandel and the Armenian church at Chinsura, the oldest and the second oldest church in this part of the country are also of considerable historical interest. Fine specimens of mediaeval Bengali temple architecture can be found at Dasghara, Gopinagar, Kankrakuli, Sanihati, Goswami-Malipara, Krishnapur, Bansberia, Boinchi, Mahanad, Somra, Sukharia, Sripur and Guptipara.

Important places of pilgrimage in the subdivision are Tribeni, Guptipara, Mahanad, Bandel and Pandua. Being situated at the point

of separation of three streams, namely the Ganges (Bhagirathi), the Saraswati and the Jamuna, Tribeni is considered as holy as Prayag (Allahabad) where the same rivers are supposed to meet. The *Brindabanchandrer Math* at Guptipara is largely frequented by Vaishnavas. Jateswarnath Siva at Mahanad is highly venerated by the followers of the *Natha* sect. The Bandel church is an important place of pilgrimage of the Roman Catholics. The tombs of Muslim saints at Pandua attract a large number of devotees. The *Makar Samkranti* festival of Tribeni held on the last day of the Bengali month of *Poush* (December-January), the *Rathajatra* festivals of Guptipara and Dasghara held in *Ashad* (June-July) and the *Karttik Puja* of Chinsura observed in *Karttik* (October-November) are the major festivals of the subdivision.

HOOGHLY-CHINSURA—The headquarters of the district situated on the west bank of the Bhagirathi in 22°55′ N and 88°24′ E, 32 km. (20 miles) north of Calcutta. It can be reached from four railway stations—Chuchura, Hooghly and Bandel on the main line of the Eastern Railway and Hooghly Ghat on its Bandel-Naihati branch. The Grand Trunk Road passes by the town which is connected with different parts of the district by all-weather metalled roads provided with regular bus services.

Constituted into a municipality as early as in 1865, the town extends over 15.5 sq. km. (6 sq. miles) and contains 11 primary schools, 16 high and higher secondary schools, 2 colleges—one for boys and the other for girls, 1 polytechnic, 30 libraries, 4 hospitals and a large *hat*. The headquarters of the Commissioner, Burdwan Division and the Deputy Inspector General of Police, Burdwan Range are also located here. The town has, therefore, a complex of public offices accounting for its importance which does not spring from industrialization as is the case with many other places in the neighbourhood.

Hooghly-Chinsura was threatened with decay at the close of the last and the beginning of the present century when its population fell from 34,761 in 1872 to 29,383 in 1901 and to 28,916 in 1911. In 1921 the population rose to 29,938 and in 1931 it was 32,634. The increase was much more marked in the following decades—49,081 in 1941, 56,805 in 1951 and 83,104 in 1961—which is attributable to the establishment of large-scale industries in the vicinity as also the influx of displaced persons from East Pakistan. That the town is mainly residential is evident from the even sex ratio; in 1961 there were 44,560 male and 38,544 female residents here, the slight excess in the male population accounting for the urban character of the township where many factory hands employed nearby undoutedly lived. In 1961 workers accounted for 26.3% and educated and literate persons 60.2% of the town's population.

Chinsura

Chinsura is the most important part of the town at present as most of the public offices are located here. An account of the activities and trade of the Dutch, who occupied the town from 1656 to 1825, has

been given in Chapter II as also in an Appendix at the end of this volume and need not be repeated here. Except for some of the barracks, the Commissioner's house, the cemetery and old sewage drains, no vestiges of Dutch rule are now visible.

To the north of the *maidan*, the old parade ground of the troops, stand three barracks of which the one at the centre running east and west for about 300 yards, houses most of the local public offices. It was constructed by the British in 1827 to accommodate troops on their first landing and was used as such until 1871. At its north-east corner and at right angles to it is another barrack running north to south which happens to be the oldest of the three having been constructed by the Dutch. A little to the west is the third barrack which was originally a hospital for troops and now accommodates the local police office. To the south-east of the main barrack is a large double-storeyed house with spacious grounds overlooking the river now used as the residence of the Divisional Commissioner of Burdwan. A tablet in the staircase of the building bears the date 1687 and a monogram composed of the letters O, V and C which stand for "Ostindiche Vereenigde Companie", i.e. the United East India Company. It is believed to be the house which Stavorinus described as erected by Mr. Sichterman, the Dutch Governor, about the year 1744. To the south of the Commissioner's house across the *maidan* is a long two-storeyed building which was an officers' barrack in the past but is now used as residential quarters for certain officers while some of the rooms are allotted to the Station Club and the Circuit House.

The old Dutch church and cemeteries

Opposite this building stands the old Dutch church, now the English Protestant Church. According to a Latin inscription it was built by Sir G. Vernet, the Dutch Director, in 1767. The old cemetery on Gorastan Road was originally a Dutch cemetery and was added to after the cession of the Dutch settlement to the British in 1825. The massive mausoleums, so common in the burial grounds of the 18th century, contained in some instances the coffins which were placed in the brickwork and not buried. The oldest grave with a legible epitaph is that of Sir Cornelius Jonge who died on 10th October, 1743. Among other tombs may be mentioned those of Daniel Overbeck, the last Dutch Governor (1840). At the western extremity of Chinsura, near the 25th mile of the G.T. Road, is a large Dutch tomb, an arched chamber with a dome and steeple. An inscription round the dome records the name of Susanah Anna Maria Yeates and the date of her death which occurred on 12th May 1809.

Fort Gustavus

In 1656 the Dutch founded Fort Gustavus at Chinsura of which the following description is given by Schouten who visited the place in 1665. "The walls are high and built of stone, and the fortifications are also covered with stone. They are furnished with cannon, and the factory is surrounded by ditches full of water. It is large and spa-

cious."[37] This description finds confirmation in an account left by the English Agent, Streynsham Master who came to Chinsura in November 1676. When Stavorinus visited Chinsura in 1770, the place had undergone changes. The Dutch Company's gardens presented a desolate appearance and the strong walls of the fort were in a ruinous condition. Having occupied the town in 1825 the British dismantled the fort and the buildings with the exception of the Dutch barrack and the Governor's house. The stones of the fort wall were used as road metal.

Temples

The temple of Shandeswar Siva at Shandeswartala, a quarter to the south of the *maidan*, is the most important temple of the town. Situated on the river bank, the shrine is largely frequented by Hindus throughout the year and especially from the last day of the month of *Chaitra* (13th or 14th April) to the last day of the succeeding month of *Baisakh* when pouring the water of the Bhagirathi on the *lingam* is regarded as an act of great religious merit. It is said that the deity was installed by one Digambar Halder in the 16th century. The temples of Dayamayi Kali at Kharua Bazar and of Ram-Sita at Akhan Bazar also attract pilgrims.

Fairs and festivals

The *Gajan* of Shandeswar observed during the last ten days of the month of *Chaitra* (March-April) is the most important festival of the place. A Dutch Governor made a present of two large brass drums to Shandeswar one of which is ceremonially beaten during the celebration. The *Karttik puja* held in the month of *Karttik* (October-November) and the *Saraswati puja* in the month of *Magh* (January-February) are celebrated in various quarters of the town with great pomp and splendour. The feast of St. John held in the Armenian Church on 25th January is largely attended by the Armenian community of Calcutta.

Imambara and mosque

North of the *maidan* lie the Mogoltuli, Armenitola and Firingitola localities bearing names reminiscent of settlements of the Mughals, Armenians and Europeans. Haji Muhammad Karbalai, a rich Persian merchant of Chinsura, built an Imambara in Mogoltuli and executed a trust deed in 1801 endowing it with *lakheraj* property at Kasimpur (now Mallik Kasem's *hat*) and Bansberia. The Imambara is now in a dilapidated condition. At Khagrajol, a quarter to the west of Firingitola, Nasratullah Khan, cousin of Nawab Khan Jahan Khan, erected a mosque in 1832 which is still in use.

Armenian and Catholic Churches

In Armenitola are the Armenian and Roman Catholic churches. The former was built by Khwaja Joseph Margar in 1697 and is the second oldest church in Bengal. Attached to it is a cemetery with many tombs, the oldest being that of Khwaja Johaness Margar who died here in 1697. The Roman Catholic church was erected in 1740, chiefly from funds bequeathed by Mrs Sebastian Shaw.

Som family

Chinsura is the place of residence of the Soms, a well known family of the district. Ram Charan Som, who flourished in the first half of

the 18th century, was the Dewan of the Dutch Company. His son Syam Ram held the post of his father but was subsequently elevated to the position of a member of the Supreme Council of the Dutch government. He constructed two bathing *ghats* on the Bhagirathi, one for the general public and the other exclusively for women. He is also known to have excavated a number of tanks at various places. Syam Ram's son Ghanasyam was also the Agent and Dewan of the Dutch.

Bhudebchandra Mukhopadhyay & Akshaychandra Sarkar

Chinsura is the birth-place of Akshaychandra Sarkar and was, for a long time, the place of residence of Bhudebchandra Mukhopadhyay. A life-sketch of the latter has been included in the Appendix entitled 'Eminent Sons of Hooghly' at the end of the volume. Akshaychandra Sarkar (1846-1917) was a prominent literary figure and journalist of his time and a close associate of Bankimchandra Chattopadhyay. He edited two periodicals—the *Sadharani*, a weekly and the *Navajiban*, a monthly and was the author of a number of books including *Samaj Samalochan*, *Alochana*, *Rupak O Rahasya*, *Sanatani* and *Gocharaner Math*. He assisted Bankimchandra in the publication of the famous journal *Banga-darshan* and his essay *Chandraloke* was included in Bankimchandra's *Kamalakanter Daptar*.

Hooghly

The part of the town known as Hooghly is historically more important as it has been the venue of the port and fort of the Portuguese and the centre of Mughal administration. Hooghly as a town owes its origin and early prosperity to the Portuguese who shifted their *Porto Piqueno* from Saptagram to here some time in the second half of the 16th century as a result of the dereliction of the Saraswati. The administrative and commercial history of the place has been dealt with in Chapter II and an Appendix at the end of the volume. It was the headquarters of the district under British rule until 1896 when the courts and most of the public offices were removed to Chinsura.

The forts

"The Portuguese fort must have covered a large area. ...It was bounded on one side by the river and on the other three sides by a deep moat fed from the river. . .The fort cannot now be traced with any certainty, but according to some, two low broken walls that run into the river opposite the jail gate are remnants of it."[28] The Mughal fort stood on the bank of the river within Hooghly proper. From the description given in English records it appears to have been quadrangular in shape with a bastion at each corner but had no moat and was very much smaller than the Portuguese fort. In the early days of British rule *Faujdar* Khan Jahan Khan lived within it in a splendid house. The fort was finally demolished in 1823.

Imambara

On account of mismanagement of the trust properties left by Haji Muhammad Mohsin, Government dismissed the trustees in 1818 and during the long litigation that followed (1818 to 1835), large surplus accumulated amounting to 8½ lakhs of rupees which was

utilized for establishing the Hooghly Mohsin College and the present Imambara building having a masonry revetment on the river bank. "The Imambara buildings cost Rs. 2,17,413, including a large clock procured from England, which cost Rs. 11,721. Work began in 1841 and was completed in 1861, the Imambara replacing an old building said to have been erected about 1694 or, according to another account, about 1717. ...The main entrance consists of a wide gate flanked by a tall tower on each side. The towers are about 80 feet high and have staircases inside leading to a gallery on the top from which an excellent view of the surrounding country for many miles can be obtained. Between them is a massive clock tower. The gate leads to a large quadrangular courtyard paved with marble in the centre of which is a masonry cistern. ...On two sides of the quadrangle are two-storeyed ranges of rooms, and on the north side stands the mosque proper."[29] The walls of the mosque are decorated with texts from the *Koran* and the interior is rich with inlaid marble and carvings, chandeliers and lanterns.

The Imambara is a Shia institution where the *Maharam* ceremony is performed with great pomp. In an enclosed compound south of the Imambara are the graves of Haji Muhammad Mohsin and his relations.

Golghat

Further south of Imambara is the locality known as Golghat where the Dutch and the English built their factories in the second and third quarters of the 17th century. The Dutch factory and store-houses were swept away by floods whereupon they shifted to Chinsura. The English also finding their factory exposed to floods built another a quarter of a mile higher up using the old factory as a store-house. This establishment was wound up in 1704 and removed to Sutanuti (Calcutta).

Bandel

Bandel appears to have been the port of Hooghly at the time of the Portuguese and the Mughals and its name is evidently derived from the Bengali word *bandar* meaning a port. After the destruction of their settlement at Hooghly by the Mughal army in 1632, the Portuguese appear to have settled in Bandel which, according to Bowrey (1679) was a "large town" and "very populous".

The only relics of the Portuguese settlement are the church and the monastery. The former replaced an older one built by the Portuguese in their fort in 1599 which was razed to the ground by the Mughal army on the capture of the town in 1632. The present church and monastery are said to have been built in 1660 by Gomez de Soto who had managed to save the keystone of the old church, bearing the date 1599, during the sack of the town. It is now set up over the eastern gate of the monastery. "The Church, which is dedicated to Nossa Senhora di Rozario (Our Lady of the Rosary), is somewhat singular in being built north and south and in having its principal altar at the north end. High up is a niche under the cross in the

centre of the main facade is a statue of the Virgin (our Blessed Lady of Happy Voyage) and child. ...Below it is the model of a full-rigged ship, a votive offering of a ship's captain, who thus commemorated his escape from shipwreck. ...The church has three altars, a small organ and several tomb-stones. ...The monastery used to be occupied by Augustinian friars, the last of whom died in 1869, and it is now in charge of the Parish Priest who, however, retains the title of Prior."[30] In front of the church stands a ship's mast which was presented by the captain of a vessel which had encountered a storm in the Bay of Bengal but was saved by the grace of the Virgin on the former's vow promising Her an offering.

"Four festivals are specially observed in the church, viz, the feast of the Blessed Lady of Happy Voyage, in the month of May; the feast of Saint Augustine, in August; the feast of the Blessed Lady of the Rosary, in November; and in Lent a solemn procession representing the journey of Christ to Calvary with the cross on his shoulder."[31]

Bali

To the south of Bandel lies Bali where one Hari Mallik, who bore the title Rayrayan, had established a big market called the Rayrayan Bazar and a *thakurbari* dedicated to Radha-Krishna. The market has now disappeared but the deity in the shrine is still in worship. Close to the temple is the *Bara Akhra*, established by Chaturdas Babaji, which has a branch at Khamarpara in Bansberia town.

Gouri Sen

In Baralpara, east of Rayrayan Bazar, resided Gouri Sen whose name is still preserved in the oft-quoted Bengali proverb '*Lage taka debe* Gouri Sen' (if one needs money, Gouri Sen would pay it) which refers to his great liberality. He was a small trader in his early life and had once sent seven boats loaded with zinc to Midnapur. A *sadhu*, proceeding on a pilgrimage, was travelling on one of the boats. On arrival of the cargo at the destination, the consignee found to his surprise that the boats contained silver and not zinc. He, however, sent them back to Gouri Sen who was informed by god Siva in a dream of the transmutation of the metal. Gouri Sen became immensely rich, built the temple of Gaurisankar Siva which is still in worship and spent his wealth lavishly for the poor and the needy without ever caring to look into the merits of each case.

Ghutia Bazar and Pipalpati

Ghutiabazar, a quarter of the town lying to the south of Hooghly, is inhabited by a number of Suvarnabanik families belonging to the Saptagrami section who migrated here from Saptagram. To the west of Ghutiabazar is the quarter of Pipalpati where on Thursdays and Sundays a large *hat* is held to transact business in rice, paddy, straw and potatoes. It is named after Mallik Kasem, who was *Faujdar* of Hooghly from 1668 to 1672. Pipalpati is the place of residence of the Mitras, an influential family of the town. Isanchandra Mitra of this family was the first non-official chairman of the Hooghly-Chinsura municipality, an office which was also held by his brother Mahendrachandra Mitra on several occasions.

Uttar Chandernagore

Uttar Chandernagore is the southernmost quarter of the town and contains the *navaratna* temple of *Bura* Siva in the Bura Sivatala locality which is notable for the terracotta panels decorating its facade.

Devanandapur

Devanandapur, a village about 3 km. (2 miles) to the north-northeast of Bandel, is the birth-place of Saratchandra Chattopadhyay, the celebrated Bengali novelist. A brief life-sketch of him has been included in the Appendix entitled 'Eminent Sons of Hooghly' at the end of this volume. The village can be reached from Bandel railway station along an all-weather metalled road.

ILCHHOBA-MANDALAI—Usually known by the joint name, Ilchhoba and Mandalai (commonly pronounced as Mollai) are two adjacent villages in Pandua police station, situated 4.8 km. (3 miles) and 3 km. (2 miles) respectively north-east of the thana headquarters. The villages can be reached from Pandua, the nearest railway station, along the Pandua-Kalna road on which bus services regularly ply. In 1961 Ilchhoba had a population of 2,169 and Mandalai of 1,521 persons. The number of educated and literate persons were 763 (35.1%) and 510 (33.5%) respectively. The villages have two Higher Secondary schools, one for boys and the other for girls, and a post office. The schools and the post office bear the joint name of the two villages. Besides, Ilchhoba contains three libraries and Mandalai an outdoor dispensary, the maintenance cost of the latter being met from the income of a Trust Fund created by late Dr. Bholanath Bose, the place being his wife's ancestral home.

Ilchhoba

The Bandyopadhyaya family

Ilchhoba has a long tradition of Sanskrit learning cultivated by the local Bandyopadhyaya family. Hiranya, the founder of the house, settled here in the middle of the 16th century. Specialized in *Nyaya* and *Smriti*, the scholars of the family were respected far and wide. Of them, Brajakumar Vidyaratna was the *Sabha Pundit* (court scholar) of the Maharaja of Burdwan and Ramagati Nyayaratna (1831-94) was the author of *Bangla Bhasa O Sahitya Bishayak Prastab* which is considered to be the first comprehensive history of Bengali literature.[23]

The Das family

The Das family of the village was founded by Lala Ramlochan Das who was a high official under the Nawabs of Bengal. He built three temples in the *Madhyapara* locality one of which, a *pancharatna* structure, contains interesting terracotta panels on its facade.

The most interesting festival of the village is the annual *jhampan* of Bak Devi, a variant name of Saraswati. The deity is represented by a piece of stone lying under a banyan tree in the *Pubpara* locality. Curiously enough, the celebration occurring on the full-moon day of the month of *Baisakh* (April-May) is attended by goat sacrifices. Ganesjanani, a two-handed image of Durga with Ganes on her lap and Siva and Kuvera on her right and left sides, is worshipped in the *Madhyapara* locality in the month of *Jyaistha* (May-June).

Mandalai

Mandalai had been a prosperous place owing to its being the place of residence of trading families such as the Kars, Nandis and Malliks and the zemindar familes Chattopadhyayas and Mukhopadhyayas. The *atchala* temple of Narugopal in the Uttarpara locality, built in 1758 by the Kars, has terracotta ornamentations of floral and vegetative designs on the facade. The *Kali puja* held on the last day of the month of *Chaitra* (March-April) and the *Jhampan* of Manasa and Ganga occurring on the *Dasahara* day in the month of *Asadh* (June-July) are the principal festivals of the village.

Jamgram

The Nandi family

Jamgram, a village to the immediate north of Mandalai, is the native place of the Nandi family, reputed to be the biggest joint family in Asia. It comprises 108 units with a total of more than 600 members. 90 units still live in the village of which 50 share the ancestral house, a palatial building having the appearance of a fort. Each member of the family, when present in the village, is provided with 250 grams of rice per day from the joint fund raised from the common property of the family which belongs to Lakshmijanardan, the family deity, looked after by two managing *sebaits* working under an advisory council elected by the heads of the units.

ITACHUNA—A village in Pandua police station situated 1.6 km. (1 mile) west-south-west of the Khanyan station on the main line of the Eastern Railway and accessible from there along a metalled road which meets the Grand Trunk Road a little to the north-east of the railway station. In 1961 the village had a population of 922 persons of whom 349 (37.8%) were educated and literate. Containing as it does a number of educational institutions including a degree college, two higher secondary schools, one for boys and the other for girls, a junior basic training college and a *Vijnan Bhavan*, the village is one of the foremost centres of education in the district. These institutions are financed from the proceeds of the Sri Narayan Trust Fund and Government aid and are run by the Prabuddha Bharat Sangha Siksha Samsad, the educational wing of the Prabuddha Bharat Sangha, a social service organization of Itachuna. Besides, the village has a charitable dispensary, an Area Library with 3,000 volumes and a school-cum-community centre and a post office. The local natural history museum, known as *Vijnan Bhavan*, was established here by the Government of India in 1960.

The Kundu family

The village is the place of residence of the Kundus, an important zemindar family of the district. Legend has it that the founder of the family hailed from Maharastra in the middle of the 18th century with the army of the Maratha raider Bhaskar Pandit who reportedly halted at the village at a place now known as Bargi-danga. A part of the army permanently settled down here and subsequently came to bear the title of Kundu being admitted into the Tili caste. Safalya Ram Kundu, an eminent son of the family, was a man of wealth and

influence. He constructed the shrine of the family deity Sridharajiu in 1766 and made a gift of 1,00,000 maunds of paddy during the great famine of 1770. His great grandson Bijoynarayan Kundu earned enormous wealth as a railway contractor and started multifarious charitable activities in and around his village by constructing and improving roads, excavating tanks, sinking tube-wells and setting up planned villages at the cost of his personal land, money and energy. He created the 'Sri Narayan Trust Fund' by donating to it his entire zemindary and a considerable portion of his earnings. Janai—a large and prosperous village in Chanditala P.S. on the right bank of the derelict Saraswati river situated 4 km. (2½ miles) north-northwest of the thana headquarters with which it is connected by an all-weather metalled road. The village is more conveniently approached through the Janai Road railway station on the Howrah Burdwan Chord line of the Eastern Railway, 1.6 km (1 mile) east of Janai, a metalled road connecting the two. In 1961 it had a population of 6,387 persons of whom 2,927 (45.8%) were educated and literate Here are located six Primary schools, a Higher Secondary school, two libraries and a post office.

According to popular belief the place is named after one Janai Chattopadhyaya who came to live here in the middle of the 15th century and converted it into a prosperous settlement. The earliest reference to the village appears in the *Bhavishya Brahamakhanda*, a Sanskrit text, compiled, according to Wilson, in the later half of the 16th century,[33] which mentions it as one of the prominent places in the Burdwan region. In view of its convenient location on the bank of the Saraswati through which a large volume of maritime trade passed to and fro from Saptagram up to the first quarter of the 17th century Janai had become a flourishing settlement in the 16th century and shared the prosperity of the age along with Singur, Chanditala, Baksa and Begampur which dotted the banks of the same river.

The Mukhopadhyaya family

The Mukhopadhyayas of Janai used to be one of the most well-known zemindar families of the district. Ramjay Mukhopadhyaya belonging to this family, built a *ghat* (flight of steps leading to the water) on the bank of the Bhagirathi at Chatra (Serampore) and a *Math* at Banaras. His brother Jagannath constructed the road between Janai and Chanditala. Purnachandra Mukhopadhyaya, another illustrious member of the family set up a theatrical stage (one of the earliest of its kind in Bengal) in his house at Janai and a drama called *Sakuntala* was performed on it on 29th May 1858.[34] Kisorimohan Gangopadhyaya of this village translated the *Mahabharata* into English. Formerly, Janai was a centre of Sanskrit learning. The *Ramnavami* festival of Raghunathjiu at Chakravartipara and the annual *puja* of Kali in the local market place are the traditional religious celebrations of the village.

The confectioners of Janai once enjoyed a wide reputation for their

specialized skill in preparing a particular type of sweetmeat known as *Manohara* which had a casein core covered up by sugar paste. The delicacy is still prepared in the village but in smaller quantities and with inferior ingredients and craftsmanship. Bhim Nag, who in his time was a famous confectioner of Calcutta, hailed from Janai.

Baksa

Baksa, a village to the immediate north of Janai, is an old place being mentioned in the *Dhanapati Upakhyan* of *Chandimangal* by *Kavikankan* Mukundaram Chakravarti. It is said that the Portuguese had a small port here in the 16th century and the village was named after the Portuguese word *Baixel* meaning a large boat. In the early years of the 18th century Rajaram Chowdhury, the Dewan of Burdwan Raj, came to live here and founded the Chowdhury family. His son Rupnarayan succeeded his father to the same post and defeated the Maratha raiders in an engagement in the Mandalhat *pargana*. He is said to have deposed in favour of Maharaja Nandakumar in the famous prosecution against the latter which prompted Edmund Burke to mention him as 'astute Rupnarain' in the course of his impeachment of Warren Hastings. He excavated a big tank known as *Chowdhury Pukur* in his native village and fed many people during the great famine of 1770. Other illustrious men of Baksa in the 18th century were Dewan Bhavanicharan Mitra, Dewan Santiram Sinha and Madanmohan Acharyya. Bhavanicharan Mitra was a man of great public spirit. In 1780 he installed an emblem of Siva, named Isanesvara, and built a complex of temples consisting of twelve *atchala* structures in two parallel rows near the main shrine. An annual *mela* is held here on the *Chaitra Samkranti* day falling in the middle of the English month of April. Bhaktaram Mitra erected a large *navaratna* temple in 1793 and dedicated it to Raghunathjiu. Dewan Santiram Sinha, a man of wealth and influence, founded the Sinha family of Jorasanko (Calcutta) to which belonged Kaliprasanna Sinha, the well-known literary figure of his time. Madanmohan Acharyya was a renowned astrologer whose fame once turned his village into an important centre of astrological studies.

Chanditala

Chanditala, 4 km. (2½ miles) south-southeast of Janai, is the headquarters of the police station of the same name and an important centre of trade and commerce. In 1961 the village had a population of 1,895 persons of whom 863 (45.5%) were educated and literate. Here are located 2 primary schools, 2 libraries, a post office and a Rural Health Centre. The village contains a shrine of goddess Chandi, the presiding deity of the village, who, according to local legend, was worshipped by Srimanta Sadagar of *Chandimangal* fame on his voyage along the Saraswati to Ceylon. The shrine is largely frequented by the local people.

Barijhati

To the immediate south of Chanditala is the village of Barijhati, the place of residence of a zemindar family known as the Chowdhuris.

It contains the *pancharatna* temple of Mallesvara Siva having ornamental terracotta panels on the facade.

KAMARPUKUR—A renowned and prosperous village in Goghat P.S. situated 4.8 km. (3 miles) west-northwest of the thana headquarters. It can be reached from Arambagh town by proceeding along the Old Nagpur Road for about 16 km. (10 miles) and then turning right to follow another metalled road that passes through the village. Regular bus services connect it with Arambagh and Vishnupur (in Bankura district). In 1961 the village had a population of 1,221 persons of whom 490 (40%) were educated and literate. It contains a degree college, a higher secondary school, a branch of the Ramakrishna Math and Mission, three libraries one of which is an Area Library and a post office.

Kamarpukur's eminence stems from the fact that it is the native village of Sri Ramakrishna who was born here on February 17, 1836. (For a life sketch of Sri Ramakrishna, please see the Appendix entitled 'Eminent Sons of Hooghly' at the end of this volume). The Rama-Krishna Math and Mission have taken possession of the ancestral home of the saint and have set up a branch on the adjoining lands, erected a memorial temple on the spot of his birth and established a number of educational and social service institutions an account of which has been given in Chapter XV on Education and Culture. The annual birth-day celebration of Sri Ramakrishna is the principal festival of the village. Two fairs take place on this occasion, one at *Bhutir Math* and the other at *Manik Rajar Bagan*. The *Jugi Siv Mandir* and the Vishnu temple situated on the north and east of the *Math* and Mission branch contain terracotta panels on their facades A special variety of *jilapi*, a sweetmeat prepared by the local confectioners with rice-powder and ground *biuli* pulse, is well known in the neighbourhood. The size of each piece is extraordinarily large and the delicacy is much sought after by the visitors to the place.

About 1.6 km. (1 mile) north of Kamarpukur is the village of Anur where stands the shrine of Bisalakshi in which the deity is represented by a huge *yoni* in the shape of a lump of earth smeared with vermilion and oil.

KHANAKUL—An important village and headquarters of the police station of the same name situated on the right bank of the derelict Kana Dwarakeswar river (also known as the Ratnakar) 19 km. (12 miles), as the crow flies, south-east of Arambagh, the subdivisional town. The village can be reached from Tarakeswar, the nearest railway station, by proceeding along an asphalt road which crosses the Mundeswari river over a fair weather wooden bridge (in other seasons road transport has to cross by ferry boats), for 19 km. (12 miles) up to Mayapur and then turning left to follow another all-weather metalled road passing through the village, 16 km. (10 miles) south-southwest of Mayapur. In 1961 it had a population of 1,361 persons

of whom 482 (35.4%) were educated and literate. The village contains a post office, a library and two primary schools.

Formerly Khanakul was an important mart for brassware, inferior cotton fabrics, silk threads and cloths, rice and vegetables. On account of the breach at Begua, a large quantity of Damodar waters started flowing through the lower part of the Kana Dwarakeswar from about the first decade of the present century deepening this portion of the channel which thus became navigable by big boats for several miles beyond Khanakul. Khanakul, already a sizable centre of trade, thus rapidly developed into an important inland port serving the surrounding country. The location of the port was at Ubidpur adjoining Khanakul on the west. Towards the thirties of the present century, the Kana Dwarakeswar began to be deprived of the waters of the Damodar and soon became completely beheaded resulting in the speedy decline of Khanakul as a centre of trade and commerce.

Confectioners of Khanakul enjoy a reputation for preparing a special kind of sweetmeat known as *Karkanda*, made of powdered puffed rice, sugar and rich spices which are mixed together with clarified butter, the adhesive. The delicacy was invented about a century ago by one Kunja Behari Rana, a confectioner of Krishnanagar.

Ubidpur

Ubidpur contains the temple of Ghanteswara Siva whose emblem is supposed to be self-grown and is highly revered by the local people. The present temple, a *sikhara* structure with a *Char-chala Jagamohana* attached to the eastern wall, was built in 1945 closely imitating the original structure on the verge of collapse. A stone sculpture representing the sun-god standing on a chariot drawn by seven horses is preserved in the shrine as Bhairava. The *gajan* of Ghanteswara held in the month of *Chaitra* (March-April) is the principal festival of the village. A *mela* is held on the occasion. Another fair takes place on the *Bhima Ekadasi* day in the month of *Magh* (January-February) to commemorate the day of discovery of the Bhairava.

Senhat and Rajhati

About 4.8 km. (3 miles) south of Khanakul are the villages Senhat and Rajhati containing a number of shrines of which the Vishnu and Kali temples of Senhat and of Bisalakshi (built in 1732) and Simhavahini of Rajhati are notable for their terracotta ornamentation.

KONNAGAR—A municipal town in Uttarpara police station bounded by the Bagkhal on the north, the Bhagirathi on the east, the Uttarpara-Kotrung municipal town on the south and the main line of the Eastern Railway on the west. The Grand Trunk Road and the Eastern Railway pass through the town, the latter having a station of the same name within the municipal limits. In 1865 it formed a ward of the newly created Serampore municipality from which it was separated in 1915 to form the Rishra-Konnagar town. In 1944 the Rishra-Konnagar municipality was divided to form the municipal towns of Rishra and Konnagar. It extends over 4.33 sq. km. (1.63 sq. miles)

and houses many industrial undertakings, viz. Lakshminarayan Jute & Manufacturing Ltd., Sri Durga Cotton Spinning Mills Ltd., Bengal Fine Spinning Mills Ltd., D. Waldie & Co. Ltd., Tata Fisson Industries Ltd., Fort William Wire Rope Co. Ltd. etc. Its population grew from 20,233 in 1951 to 29,443 in 1961 accounting for an increase of 45.5% within a decade. The bulk of the increase was due to immigration of factory labour reflected in the increase in the male population from 12,549 in 1951 to 17,679 in 1961 and their large excess over females who numbered 7,684 in 1951 and 11,764 in 1961. According to the 1961 census, the total number of workers in the town was 10,732 of whom 6,822 (63.5%) were engaged in manufacturing other than household industries and 1,216 (11.3%) in trade and commerce. The number of educated and literate persons in 1961 was 15,924 or 54% of the total population of the town.

History

Konnagar is an old place being mentioned in the *Manasa Mangal* of Bipradas Piplai composed in A.D. 1495. With the growth of European trade Konnagar rose to prominence. Early in the 19th century there was a dock here where small ships were built. Later in that century it became a prosperous village being the residence of many wealthy persons whose affluence stemmed from the growing European trade in and around Calcutta.

Mitra family

Konnagar is the place of residence of the Mitras, an important family of the district. Raja Digambar Mitra (1818-1879) of this family was a prominent citizen of Calcutta in the 19th century. He gathered a fortune in the silk and indigo trade and later purchased big zemindari estates. He was the first Indian Sheriff of Calcutta and was elected the president of British Indian Association. Trailokya Nath Mitra, another illustrious scion of the family, was the Chairman of the Serampore municipality in which capacity he introduced many measures benefiting Konnagar which was then a part of Serampore town.

Sri Aurobindo

Konnagar is the ancestral place of Sri Aurobindo a short biography of whom has been included in the appendix entitled 'Eminent Sons of Hooghly' at the end of this volume.

Temples

The *Dwadasa Siva Mandir*, a complex of twelve Siva temples arranged in a row along the bank of the Bhagirathi in two groups, six in each, is an object of interest in the town. Between the two groups of shrines lies a broad ghat leading to the waters of the river.

KRISHNANAGAR—A place of Vaishnava pilgrimage and a traditional centre of Sanskrit learning 1.6 km. (1 mile) north of Khanakul (see Khanakul) with which it is connected by a metalled road. To distinguish it from Krishnanagar in Nadia district and a village of the same name in Jangipara P.S., it is generally called Khanakul-Krishnanagar. In 1961 the village had a population of 1,389 persons of whom 438 (31.5%) were educated and literate. Here are located two Primary schools and a library known as the Ramprasad Public Library.

Sanskrit learning

According to available information, the history of the places dates back at least up to the early years of the 16th century when Kanad Tarkabagis, born some time between 1460-70 and educated under the reputed scholars Basudeva Sarvabhauma and Janakinath Churamani of Nabadwip, came to live here.[35] An eminent scholar in *Nyaya*, he wrote a number of books on the subject, the most important being a commentary on the *Tatvachintamani*, a part of which known as the *Anumanakhanda* has been discovered. His other known works are *Bhasharatna*, *Tarkabadarthamanjari* and a commentary on *Abayabaprakarana*.[36] In the middle of the 17th century, a renowned scholar of *Smriti*, Narayan Thakur (Bandyopadhyay) who was originally a native of Bali (in Howrah district) and educated in Varanasi settled here and evolved an independent version of Hindu law, popularly known as the opinion of the Khanakul-Krishnanagar school, which has guided the socio-religious life of the Hindus of a large part of south-western Bengal for the last three centuries. His followers founded the largest *Vidya Samaj* on the west of the Bhagirathi which, in course of time, embraced some 300 villages in the present subdivisions of Arambagh and Ghatal (Midnapur district). Of his works *Dhaturatnakara* (1664), *Smritisara* (1680), *Suddhikarika* and *Savachananirvachana Smritisarvasva* deserve special mention. The descendants of Kanad and Narayan Thakur kept up the tradition of the local *Vidya Samaj* and students of *Nyaya* and *Smriti* came to the many *tols* established by them from various parts of the country. The Maratha raids in the middle of the 18th century unsettled the intellectual life of the place. Pandit Mahes Chandra Nyayaratna, Principal of the Sanskrit College, Calcutta, who was deputed by Government in 1891 to inspect the *tols* of Bengal, reported: "Khanakul-Krishnanagar. long noted as one of the most eminent seats of learning in Bengal, has but four *tols* at present, none of them in flourishing condition. Nor do its present Pandits enjoy the reputation that their predecessors did." The last local *tol* was closed down recently.

Abhiram Goswami

Krishnanagar came to be recognized as a place of Vaishnava pilgrimage and one of the *Dvadasa Pats* owing to its being the place of residence of Abhiram Goswami, a close associate of Sri Chaitanya ranked among the twelve Gopals in the *Gouraganaddesadipika* of Kabi Karnapura. Having lost his favourite image of Srikanta, Abhiram, so goes the legend, wandered from place to place and came to Krishnanagar where according to a divine message heard in a dream he discovered the image of Gopinath and installed it in a temple. He introduced a number of festivals in honour of the deity which are observed to this day.

Raychaudhuri family

The local Raychaudhuri family was founded early in the 17th century by one Jadavendu Raychaudhuri who was a high official under the Sultans of Bengal. Legend has it that following divine instructions he removed a piece of stone from the palace gate of the

Sultan to make an image of Radhaballava to be installed in a temple in the village. The act cost him his life but his head, severed under the orders of the Sultan, exclaimed in despair that he could not complete the installation of the deity. The news of this miraculous event was carried to the Sultan who, apprehending celestial displeasure, appointed Jadavendu's son to the post held by his father and made liberal grants for the maintenance of the temple. Bansidhar, the grandson of Jadavendu, brought *Kulin* Brahmins, scholars, weavers and others from different parts of the country and settled them at Krishnanagar. Descendants of Bansidhar were influential zemindars of the place.

Temples

The temple of Gopinath, a large *ekaratna* structure with a detached assembly hall in front, is the most important shrine in the village. It was built in 1812 when the earlier abode of the god, a *navaratna* edifice built in 1774 and standing close by, had to be abandoned. Within the sanctum are the images of Gopinath, Balarama and Abhiram Goswami which are regularly worshipped. The large *ekaratna* temple of Radhaballava was built by Jadavendu in the first half of the 17th century and carries on its walls terracotta plaques containing foliage motifs.

Fairs and festivals

Vaishnava festivals held in honour of Gopinath, viz. the *Rasotsava* held in the month of *Karttik* (October-November) and the *Mahotsava* observed on the seventh day of the black half of the month of *Chaitra* (March-April), are the principal religious functions of the village. The former lasts for three days and is attended by a large fair while the latter continues for three days when numerous Vaishnavas visit the place.

Radhanagar

Radhanagar, to the immediate east of Krishnanagar across the Kana Dwarakeswar channel, is the place of residence of several important families which produced a galaxy of eminent persons.

Ratnagarbha Agambagis

Ratnagarbha Agambagis, a great Tantrik of Radhanagar, flourished in the middle of the 18th century and was reputed to be a *Baksiddha*, i.e. one whose words always proved true. He installed the image of Anandamayee Kali in a small shrine of triangular shape representing the *yantra*, symbol of the Sakti. The temple, standing in the local cremation ground, is frequented by many.

Roy family

The local Roy family was founded by one Krishnachandra Bandyopadhyay (Roy), a high official under the Nawabs of Bengal who was sent to Krishnanagar to subdue the Raychaudhuris who had stopped paying revenues. Krishnachandra sent the defaulter to Murshidabad and vouchsafed for his safety. But the Nawab put him to death whereupon Krishnachandra relinquished his post in protest and retired to Radhanagar. Regretting his act the Nawab granted the zemindari of Radhanagar to Brajabinod Roy, son of Krishnachandra. Brajabinod's grandson was Raja Rammohan Roy, a brief account of whose life has been given in the appendix entitled 'Eminent Sons of Hooghly' at

the end of this volume. To perpetuate his memory a building housing the Rammohan Institute has been erected on the land where once stood the ancestral home of the Raja. Recently a college styled Raja Rammohan Roy Mahavidyalaya has been established at Radhanagar.

Basu family

The Basus of Radhanagar formed an important zemindar family of the place. Bhupendranath Basu of this family was an eminent lawyer of the Calcutta High Court who became the president of the Indian National Congress in 1914-15.

Sarbadhikari family

The Sarbadhikari family of Radhanagar was founded by Ratneswar Sarbadhikari (Basu) who married the daughter of Jadavendu Raychaudhuri and came to live here at the instance of the latter. Sir Devaprasad Sarbadhikari and Col. Suresprasad Sarbadhikari were eminent sons of this family. Sir Devaprasad was a distinguished educationist and the Vice-Chancellor of the University of Calcutta for some time. Suresprasad attained great renown as a surgeon.

Dravamayi Devi

Dravamayi Devi, a reputed Sanskrit scholar of Beraberi, a village near Krishnanagar, flourished in the middle of the 19th century. Having lost her husband at a tender age, she devoted herself to studies and acquired proficiency in *Vyakarana, Kavya, Alamkara* and *Nyaya* when she was no more than fourteen years old. She taught in the *tol* of her father and established her superiority by defeating many learned pundits in scholastic discourses.

MAGRA—Headquarters of the Magra police station and an important trade centre on the right bank of the Kana Nadi (locally known as the Magra Khal), Magra is situated 9.7 km. (6 miles) north of Chinsura with which it is connected by the Grand Trunk Road and the main line of the Eastern Railway, the latter having a station of the same name at the place. The mart handles considerable goods traffic passing through it by road and rail, the chief items being paddy, rice, jute, tobacco and fine sand. The large wholesale-cum-retail market is attended, on an average, by 1,400 persons daily. Magra sand of well known quality is raised from the old beds of the Damodar and its distributaries in and around the place.

The village is fairly old having figured in Rennell's atlas as 'Maggura Gaut'. In the Hooghly District Gazetteer published in 1912, O'Malley had stated: "The manufacture of cotton cloths at Magra dates back a long time for the 'Minutes of Consultations' of Fort William mention the despatch of *gumashtas* to a large *aurung* or factory at Golagore, near Magra. . . . The early records of Hooghly show that the *aurung* was replaced before 1765 by a Commercial Residency at Golagore. . . . Later, it appears from a report of the Resident in 1810, that a considerable trade has sprung up in *sun* or hemp at Golagore. . . . After the abolition of the Residency in 1835, though the manufacture of cotton and silk declined, there was a development of trade owing to the construction of the Grand Trunk Road. . . . This improvement continued until the East Indian Railway drew off the bulk

of the trade to the north-west. The trade became local, and gradually dwindled."[37]

Nayasarai

Nayasarai, an old village with historical associations, is situated at the outfall of the Magra Khal into the Bhagirathi 5.6 km. (3½ miles) north-east of Magra. "It was a place of considerable importance in old days, as the Magra Khal formed the main channel of the Damodar, and the line of traffic to Burdwan lay through Nayasarai. The old road to Nadia and Murshidabad also passed through it; and mention is made of Nawab Siraj-ud-daula halting here on the 19th January 1757 when he was marching up to recover Hooghly, and of Clive's arrival on the 13th June *en route* to Plassey."[38]

Baghati

About a mile to the east of Magra is the village Baghati, the native place of Ramgopal Ghosh, a prominent merchant of Calcutta of the 19th century who took active interest in social reforms and spread of education. His gift of oratory earned for him the title of 'Demosthenes of Bengal'. Shib Chandra Banerji of this village was a noted industrialist who established a residential college here named after his father.

MAHANAD—An ancient place lying partly in Pandua and partly in Polba thanas 6.4 km. (4 miles) south of Pandua railway station with which it is connected by a metalled road. The place can also be reached from Magra railway station, about 8 km. (5 miles) to the east, along an all-weather metalled road on which bus services regularly ply.

Ancient period

N. G. Majumdar of the Archaeological Survey of India conducted explorations here in 1934-35 and reported that "the village of Mahanad in Hooghly District has from time to time yielded gold coins of Kushana and Gupta dynasties and its antiquity is proved also by the numerous mounds situated in this village and its neighbourhood as well as by fragments of stone sculptures that lie scattered all over the locality." The surface and underground finds, now preserved in the Indian Museum, Calcutta, included "pottery, a stucco head showing the style of the 5th-6th century A.D., . . . a terracotta matrix showing a figure in a graceful pose (height, 4½"). On grounds of style it has to be assigned to the Gupta period. The other object is a fragmentary figure in black stone, representing a female standing under a tree, probably Mayadevi (height, 9½") collected from Sudarsan a village near Mahanad which is also full of old remains."[39] On open grounds adjacent to the temple of Jatesvaranatha lie stone images of Ekapada Bhairava, Bhairavanatha, Kalabhairava and a huge *Yonipatta* representing a wide range of Saiva iconography. Besides, there are numerous *lingams* in various stages of preservation and fragmentary pieces of architectural stones presumably from temples of the Pala-Sena period. From the profusion of Saiva sculptures it appears that Mahanad was an important seat of Saiva worship in the ancient period. Corroborative legends testify that the sage Vasishtha, bent

upon making the place as holy as Varanasi, as the greatest Saiva centre in India, caused the Ganges to appear here. A large ancient tank called Vasishtha-ganga to the north of the Jatesvaranatha temple is shown to this day as a relic of the sage's performance. On the north of the Vasishtha-ganga there is an old tank known as Chandradaha said to have been excavated by Raja Chandraketu. The Jivatkunda, another ancient tank to the immediate south of Vasishtha-ganga, is supposed to have possessed the power of restoring the dead to life.

Muslim conquest

Although definite information is lacking about the rulers of the place, it seems that Mahanad was a feudatory kingdom during the Pala and Sena periods which assumed complete independence on the advent of the Muslims only to fall to them after about a century. According to legends current at Pandua, Mahanad was occupied by the Muslims when they conquered Pandua. But local belief has it that the Raja of Mahanad fought with the Muslim king of Pandua and a story similar to the one prevalent at Dwarbasini (see Dwarbasini) is told about the downfall of the Hindu Raja of Mahanad. The Muslim saint involved in the present case was one Kajiman Saheb whose grave in the Fakirpara locality is now venerated by Hindus and Muslims alike.

Natha sect

Mahanad had been an important centre of the Natha sect and the name of the place (*maha*—great, *nad*—sound) is reminiscent of the *nada sadhana* of this group whose religious belief was an amalgam of the earlier Saivism flourishing at the place and the *Tantrik* form of Buddhism prevalent during the Pala-Sena period. The principal deity of the Nathas of Mahanad was Jatesvaranatha Siva and the local *Math* (religious centre) was under the control of a priest known as Jogiraja, there being two other branches one at Dum Dum near Calcutta and the other at Syamsundarpur-Patna in the Midnapur district.[40] In course of time Mahanad's importance as a Natha centre considerably declined and the place has now ceased to be the seat of the *Jogiraja*.

Temples

The temple of Jatesvaranatha is a lofty *sikhara* structure enshrining the emblems of Siva and ancillary deities including two images of Ganesa. Around the temple stand several minor shrines one of which, a *jor-bangla* temple dedicated to Annapurna, houses two images of Buddha besides the icon of the presiding deity. The Lalji temple in the Karpara locality is a tall conical building of unusual shape built in 1851 but now in disrepair. The *navaratna* temple of Brahmamayee at Dakshinapara enshrines an image of Kali.

Festival

The *Siva-ratri* festival held in honour of Jatesvaranatha in the month of *Phalgun* (February-March) is the principal religious function of the place when a fair known as *Manader Jat* is held in front of the temple.

MAHES—See Serampore.

PANDUA—A non-municipal town and an important place of

historical interest, 22.4 km. (14 miles) from the district headquarters by the Grand Trunk Road passing through the place which also lies on the main line of the Eastern Railway, 61 km. (38 miles) away from the Howrah railway station. An all-weather metalled road connects it with Kalna, a subdivisional town in Burdwan district. It is the headquarters of the police station and the development block of the same name and is an important centre of trade and commerce. The town covers an area of 3.75 sq. km. (1.45 sq. miles) populated, according to the 1961 Census, by 8,158 persons of whom 3,077 (37.7%) were educated and literate. Here are located 14 rice mills, several cold storages, a post office, a rural health-centre and a higher secondary school. A large wholesale-cum-retail *hat* dealing in rice, paddy, jute, potato and cattle is held here on Wednesdays and Sundays, the average daily attendance being 2,400.

The *Sunnis*

Pandua is the chief centre of the *Sunni* Muslims of the district and is inhabited by many Asraf families including a number of *Aimadars*, i.e. holders of land-grants, who are said to be descendants of Muslim officers and soldiers who settled here in the pre-Mughal days.

History

Ancient period

From the profusion of architectural remains it may be conjectured that the place flourished during the Pala and Sena periods. After their conquest of Nadia in A.D. 1201, the Muslims pushed up north leaving the area south of Nadia uninvaded for about a century when the feudatory princes of the Pandua-Mahanad-Furfura-Saptagram-Tribeni region assumed independence and retained it for about one hundred years.

Mediaeval period

Legend has it that six hundred years ago Pandua was ruled by a Hindu king, Pandu Raja, who lived at Mahanad (or at Pandua according to another version). A number of Muslims then lived at Pandua including Shah Safiuddin, nephew of Emperor Firuz Shah of Delhi. Enraged at the sacrifice of a cow on the occasion of the circumcision ceremony of a Muslim boy, the Raja had him killed which prompted Shah Safi to go to Delhi and procure military assistance from the emperor to punish the Raja. Before returning to Bengal Safiuddin obtained the blessings of Bu Ali Qalandar, a renowned saint of Panipat-Karnal, but could not defeat the Raja who was in possession of a tank called *Jivat Kunda*, the waters of which had the miraculous power of restoring the dead to life. Safi then took recourse to the same stratagem to pollute the tank as has been related under the entries Dwarbasini and Mahanad and overpowered the King. The old temple of Pandua was destroyed and the present mosque was built with its material.

Analyzing this legend, Blochmann observed: "I have not met with Safiuddin's name in any Indian History, or in the numerous biographies of Muhammadan saints. The story, however, contains one historical personage, the saint Bu Ali Qalandar of Panipat-Karnal. . . . Bu Ali Qalandar lived at Panipat and died there at an

advanced age in the middle of September 1324 A.D. ...The date of the death of the saint enables us to ascertain which of the three Emperors of Delhi that bore the name of Firuz Shah, corresponds to the Firuz Shah of the Panduah legend. ...We see that the Panduah legend means Firuz Shah II. ...We may thus safely refer the foundation of Muhammadan settlement at Panduah to the very end of the 13th century, ...a date with which not only the style of architecture of the Pathan mosque of Panduah, but also the inscriptions on Zafar's tomb in Tribeni (A.H. 713 or A.D. 1313) fully agree."[41]

Pandua's prosperity during the Pathan period was perhaps facilitated by its probable location on the bank of the Damodar which, prior to its assumption of the Kana Nadi course, flowed past the place, thus providing a good water communication with the Bhagirathi. Later on, the Padishahi Road to Saptagram passed through Pandua so that in the 15th and 16th centuries Pandua was able to maintain its political strength though the Damodar shifted its course. In the 18th century Pandua was noted for its hand-made paper which was prized for its thinness and durability. In the early years of British rule Pandua was infested with notorious dacoits who could be put down only after a sustained effort.

Monuments

"From an antiquarian point of view, Pandua is one of the most interesting places in the district. The chief remains of antiquity are a tower, two mosques, a tomb, and two tanks. The most noticeable of these remains is the tower, which stands about a hundred yards east of the fourth furlong of the 42nd mile of the Grand Trunk Road. It is round and has five storeys, each lessening in diameter from 60 feet at the base to 15 feet at the top. The outer face is ornamented with convex fluting, and the inside walls are enamelled. In the centre of the building is a circular staircase leading to the top, and at the base of each storey is a doorway leading to a narrow terrace running all round the building. The total height of the tower, including the pinnacle, used to be 125 feet, but the topmost portion fell down in the earthquake of 1885. In 1907 the tower was repaired at the cost of Government, the fifth storey (about 20 feet high) with a dome and pinnacle being rebuilt. The tower is now 127 feet high and has been replastered and whitewashed. The loopholes in the outer wall having been cleared, and the inside staircase rebuilt, the ascent to the top is easy.

Minar

"The object with which the tower was built is not clear. Popularly, it is believed to be a *muazzin* tower, from the top of which the faithful were called to prayer; and according to Musalman traditions it was erected by Shah Sufi-ud-din after he gained a victory over the local Hindu chief."[42] An inscription in proto-Bengali script is to be found near the base of the inner wall of the first storey of the *minar* which has not been deciphered yet.

Balsdarwaja masjid

"About 175 feet west of the tower stands a ruined mosque,* which was in much better preservation 30 years ago. It is a long structure, rather low in height inside. The roof, now more or less dismantled,† had numerous low domes, of which 63 were counted by Blochmann. Its roof rested on high pointed arches, supported by two rows of 21 pillars, each 6 feet high. The pillars are of basalt, with several horizontal bands, in various patterns; about half of them have shafts ornamented in Hindu fashion (not Buddhistic, as Blochmann conjectured) with garlands and pendant bells.** The mosque walls and arches are made of small light-red bricks. The inner western wall is diversified with several low niches. The niches have quatrefoil arches and are finely ornamented on the sides with trellised net-work, with diamond patterns below the arches and with a rosette on each side above them. In the north-west corner of the mosque is a high platform of solid masonry with a small room on top, which is said to have served Shah Sufi as a *Chillah-Khanah i.e.*, room used by hermits for a 40 days' 'retreat'.†† A few unfinished oblong pillars of black basalt lie about.††† No inscription has been found in the mosque. From its low height, thin bricks, numerous domes, and Hindu ornamentation, the mosque appears architecturally to belong to the early Pathan period. . . .

Shah Sufi's *astanah*

"South of the tower, on the opposite side of the Grand Trunk Road, is the *astanah* or tomb of Shah Sufi-ud-din, a small white-washed structure, which is kept in repair by subscriptions raised by the Muhammadans. It has no inscription. Several fairs are held near the *astanah*, to which many people come and present offerings in the hope that their desires will be fulfilled.

The second mosque

"West of this tomb is another ruined mosque.*** Its walls are ornamented with patterns, partly Hindu and partly Muhammadan. On the outside are three basalt tablets having Arabic inscriptions in large Tughra characters; they consist of verses from the Koran with blessings of the Prophet. Inside, on the central tablet high above the ground, is another Arabic inscription. It records the erection of the mosque by Ulugh Majlis-i-Azam in the reign of Yusuf Shah, dated 882 H. (1477 A.D.). There is a short inscription in this mosque stating, curiously enough, that it was repaired by a Hindu named Lal Kunwar Nath in 1177 H. (1763 A.D.). This shows that the *dargah* was venerated not only by Musalmans, but also by Hindus. . . .

"There is also a modern mosque called Kutb Sahib mosque. It has a Persian inscription that records its construction by Fath Khan, an

*The mosque is known as *Balsdarwaja masjid*.—(Ed.)

†The roof has since fallen down completely.—(Ed.)

**These pillars can be ascribed to the Pala period.—(Ed.)

††At present there is no room on the platform.—(Ed.)

†††A number of architectural members, pedestals etc. can be found scattered in and around the mosque. The stage in the north-east corner of the mosque is particularly noticeable.—(Ed.)

***The mosque has since been rebuilt.—(Ed.)

Afgan, in the 9th year of the Emperor Muhammad Shah's reign, *i.e.*, 1140 H. (1727-28 A.D.)."[49]

A large fair is held here in the Bengali month of *Magh* (January-February), lasting for a month, and another in *Baisakh* (April-May).

Champta

Champta, a village 4.8 km. (3 miles) east of Pandua, is the native place of Ramnidhi Gupta (1781-1830), the famous poet and musician. Popularly known as Nidhu Babu, he took training in various branches of music at Chhapra in Bihar. Later, he introduced *Tappa* music in Bengal which was highly prized as *Nidhubabur Tappa*. A collection of his songs was published in 1837 bearing the title *Gitaratna Grantha*.

Kathagor

About 4.8 km. (3 miles) south-west of Pandua is Kathagor, the place of residence of the Basu Malliks. Through the munificence of Srigopal Mallik (1850-1899) of this family, the University of Calcutta created a fellowship after his name for the study of Vedanta. Raja Subodh Chandra Mallik (1879-1920), another eminent scion of the family, was a notable figure in the *Swadesi* movement. In 1905 he donated one lakh of rupees for development of national education and earned the title of 'Raja' from his countrymen.

RAJBALHAT—A large village in Jangipara P.S. 6.4 km. (4 miles) west of Antpur from which it is accessible by an all-weather metalled road, provided with regular bus services, that connects Antpur with Haripal railway station (see Antpur). In 1961 the village had a population of 8,350 persons of whom 3,184 (38.1%) were educated and literate. The village is a traditional centre of handloom weaving which is still the major industry of the place. Here are located five primary schools, one Higher Secondary school, a library, a museum and a post office.

Museum and library

AMULYA PRATNASALA, the museum, has a rich collection of antiquities and art objects, viz. ornamental terracotta plaques, art objects from Nepal, an image of Vishnu assignable to the Pala period, coins, manuscripts, the personal diary of Acharyya Jagadischandra Basu etc. The library, known as Hemchandra Smriti Pathagar, has 7,000 books and a membership of 235.

Trade and commerce

The predominance of trading and manufacturing castes such as the *Suvarnabaniks*, *Tambulibaniks*, *Gandhabaniks*, *Sankhabaniks*, *Tantuvayas*, *Telis*, *Tilis*, *Karmakaras* and *Kumbhakaras* in the population of the village testifies to its erstwhile commercial prosperity. In 1786 the East India Company set up a commercial Residency here which was transferred to Haripal about 1790. 'Rajbaulhaut' appears in Rennell's atlas as a police station and the junction of several roads. After the diversion of the trade of the E.I. Company to the east of the district and the ravages of the Burdwan fever here in the seventies of the last century, the place lost its importance. Of late, handloom textile weaving has been revived and the products of the village enjoy a wide market.

Rajballabhi Devi

In *Pitha-nirnaya*, a Sanskrit text listing the centres of Sakti worship, Rajbalhat appears as a *Sakta-pitha*, i.e. a centre of Sakti worship with Chandi as the presiding deity.[44] Chandi appears to be no other than Rajballabhi Devi, the celebrated local deity, from whom the village takes its name. Legend has it that ages ago the goddess was living in a local household in the guise of a maidservant. Attracted by her beauty, a merchant passing by the village with a fleet of seven boats, asked her to come to him. Bent upon punishing the man for his evil desire, the disguised goddess set her foot on six of the boats one after the other and they sank immediately. The merchant on board the last boat then fell at her feet and was granted pardon. As a token of gratitude he built a temple and installed the image of Rajballabhi Devi. The present temple of the goddess is a small flat-roofed structure within an enclosed compound housing ancillary shrines.

Other monuments

A group of three *atchala* temples stands at Ghataktala in the Uttarpara locality of which the shrines of Radhakanta and Sitaram built in 1733 and 1737 respectively have terracotta panels on their facades. The other temple is a simple structure built in 1804 and housing an emblem of Siva. The Damodar temple at the Silpara locality constructed in 1724 also contains terracotta embellishments. Remnants of a palace of the Basantapur branch of the Bhursut Raj family are still to be seen at the Depara locality. The ruins are popularly ascribed to one Chandal Raja who is believed to have ruled the place in the past.

The ceremony performed on the *Navami* or the third day of the *Durgapuja* (September-October) in honour of Rajballabhi Devi is the major festival of the place attended by a fair. The *Charak* of Bura Siva is another important religious function of the village.

Gulita

The renowned Bengali poet Hemchandra Bandyopadhyay (1838-1903) was born at Gulita, a village to the immediate east of Rajbalhat and had his early education at the latter place. His best known work is *Vritrasamhar Kavya*, the first part of which entitled *Vritrasamhara* was published in 1875 while the second part named *Mahakavya* came out in 1877.[45] Other works of Hemchandra are *Chintatarangini*, *Kavitavali*, *Asakanan*, *Chhayamayee*, *Bibidha Kavita*, *Dasamahavidya* and *Chittabikas*.

RISHRA—A municipal town in Serampore P.S. served by the Grand Trunk Road and the main line of the Eastern Railway which has a station here 17.6 km. (11 miles) away from the Howrah terminus. In 1865 it formed a ward of the Serampore municipality from which it was separated in 1915 to form the Rishra-Konnagar municipality which was divided in 1944 into two municipal towns—Rishra and Konnagar.

Extending over an area of 3.24 sq. km. (1.25 sq. miles), Rishra is a mill town housing numerous industrial establishments of which

the Wellington Jute Mill, Hastings Jute Mill, Presidency Jute Mill, Alkali & Chemical Corporation of India Ltd., J. K. Steel Ltd., Lakshminarayan Cotton Mill, Jayasree Textiles & Industries Corporation, Jindwala Industries Corporation, Kusum Products Ltd., Phosphate Company Ltd., Sramik Cotton Industries Ltd. and United Vegetable Manufacturing Ltd. are the more important. Its population has increased from 27,465 in 1951 to 38,535 in 1961 accounting for a growth of 40.3% within a decade. The bulk of the increase is due to immigration of factory labour as is indicated by the growth of males from 17,598 in 1951 to 24,790 in 1961 and their large excess over females who in 1961 numbered 13,745. According to the 1961 Census, the total number of workers in the town was 16,628 of whom 12,108 (72.7%) were engaged in manufacturing other than household industries and 1,735 (10.4%) employed in trade and commerce. The number of educated and literate persons in 1961 was 17,939 or 46.6% of the total population of the town. The educational institutions consist of the Bidhan Chandra College, four Higher Secondary schools and fourteen Primary schools, four of which are run by the municipality.

History

Rishra is an old place being mentioned in the *Mansamangal* of Bipradas Piplai (A.D. 1495). It gained in importance during the early years of British rule. Warren Hastings had a house here where he frequently stayed. Originally it was a big centre of betel cultivation carried on by people of the *Barujibi* caste who had a large settlement here. From the end of the 18th century European planters and factors started manufacturing chintz indigo and cochineal in and around Rishra. In 1855 George Aukland established the first jute mill in India under the name Ichara (Rishra) Yarn Mills Co. Ltd. which later came to be known as Wellington Jute Mill.

Places of religious interest

The shrine of Siddheswari Kali, a tall modern structure built in 1905 on the Shashthitala Street, is the best known temple of the town. The deity is said to have been installed by Jatadhar Pakrasi of the Pakrasi family of the place as early as in A.D. 1404. Keshabchandra Sen, the renowned leader of the Brahmo Samaj, purchased a garden in the Morpukur locality, named it *Sadhan Kanan* and lived there for some time with his friends and disciples. The Gauriya Math has a branch and a temple at Rishra. The *Prem Mandir* enshrining the image of Ardhanarisvara was founded in 1933. Of the Muslim places of worship the *Morpukur Masjid*, constructed in the middle of the 18th century, and the *Bara Masjid* on the Grand Trunk Road, built in 1870, deserve mention.

SAPTAGRAM—Now a small hamlet in Magra P.S. situated on the left bank of the derelict Saraswati river 6.4 km. (4 miles) north of Chinsura-Hooghly town along the Grand Trunk Road which passes through it, Saptagram is the site of one of the biggest ports and emporiums of mediaeval Bengal. The village is also accessible from

Adi Saptagram railway station on the main line of the Eastern Railway which is connected with the G.T. Road by a kilometre-long non-metalled road. In 1961 it had a population of 506 persons of whom 220 (43.4%) were educated and literate.

Saptagram literally means seven villages, which according to local belief, are—Bansberia, Krishnapur, Basudevpur, Nityanandapur, Sibpur, Sambachora and Baladghati. Legend has it that in days gone by seven sons of Priyabanta, king of Kanyakubja, renounced worldly life and settled at this holy place near the confluence of the Ganges and the Yamuna in seven villages which later formed Saptagram.

History: ancient period

Some are inclined to identify Saptagram with the port of Gange mentioned by Pliny and Ptolemy. But available historical evidence does not warrant such a conclusion. It appears, however, that with the decline of Tamralipta on account of the silting up of the combined channel of the Saraswati and the Rupnarayan around 8th century A.D., Saptagram began to grow as the most important substitute port in western Bengal. The Saraswati carried the bulk of the waters of the Bhagirathi at least up to the 10th century creating favourable conditions for the growth of Saptagram. Profusion of Pala sculptures found in and around the place attests its importance during that period. The fact that the Turko-Afgans had to wait for a century after their conquest of Nadia to launch expeditions against Saptagram is another proof of the military prowess of the rulers of the region which checked the greed of the invaders. But once victory was won, they swooped down on the temples, demolished them and used the materials for the construction of their own mosques and *astanahs* on the very same sites. Several *madrasahs* were also started in Saptagram-Tribeni region to propagate Islamic learning.

Muslim conquest

During the reign of Ruknuddin Kaikaus (A.D. 1291-1301) Zafar Khan Ghazi, a general of Kaikaus, launched an attack on Saptagram-Tribeni but was killed around A.D. 1300 in an encounter with one Bhudev Nripati who must have been a strong opponent. According to *Kursinama*, a son and successor of Zafar Khan Ghazi, named Ugwhan Khan resumed the fight, defeated the Raja and married his daughter. This Ugwhan Khan is identified with Ziauddin Ulugh Khan who, under Shamsuddin Firuz Shah (A.D. 1301-1322), Sultan of Lakhnawati, resumed the fight against Saptagram and he, and after him Zafar Khan Bahram Atigin, completed and consolidated the conquest. Saptagram became a mint town and an important administrative centre and under Muhammad-Bin-Tughlak (A.D. 1325-51) shared the position and status of Lakhnawati and Sonargaon.

The port

A more or less connected history of the port of Saptagram is available from the middle of the 14th century. The earliest account is of Ibn Batuta who entered Bengal through this port in A.D. 1345-46 and found it busy and prosperous. In 1495, while composing his

Manasavijaya, Bipradas Piplai described Saptagram as a thickly populated place and its inhabitants enormously affluent. According to *Chaitanya Bhagavata* (*circa* A.D. 1530) of Brindavan Das, Saptagram was a flourishing settlement of merchants among whom Nityananda preached Vaishnavism. The 14th, 15th and a part of the 16th century were the palmiest days of this port. The Portuguese arrived by the fourth decade of the 16th century and in A.D. 1537-38 they had already established a factory and a custom house there. Caeser Frederick, the Venetian merchant, who visited Bengal in 1567 also testified to its handling a large volume of overseas trade. The Portuguese named Saptagram *Porto Pequeno* (little port) and Chittagong *Porto Grande* (big port).

The dereliction of the Saraswati on which Saptagram stood started from the 16th century; an account of it has been given in Chapter I. This compelled the Portuguese to shift their *Porto Piqueno* to Hooghly on the main stream of the Bhagirathi. Ralph Fitch, visiting the place towards the close of the 16th century, attested this although he found Saptagram still a prosperous city. *Ain-i-Akbari* (completed in 1598) names Hooghly as the chief port of Western Bengal, a fact which finds confirmation in Mukundaram's *Chandimangal* (*circa* A.D. 1600). Although Hooghly was rising at the cost of Saptagram from the last quarter of the 16th century, the fame of Saptagram survived in several later accounts, written in ignorance of actual facts, e.g. De Laet (1631), Peter Heyleyn (1652), Admiral Warwick (1667) and Thevenot (1668). The error is explained by the fact that Saptagram was sometimes confused with Hooghly. But Van den Broucke correctly assigned a minor place to Saptagram in his map drawn in 1660. It ceased to be a mint town towards the end of Akbar's reign. By Murshid Quli Khan's time, it did not figure in his revenue accounts prepared in 1719 and had faded out of history In the 18th and the first half of the 19th century, however, Saptagram again attracted a little notice owing to its hand-made paper industry which declined with the introduction of machine-made paper. In recent years a factory for the manufacture of spun pipes has been set up at Adi Saptagram.

Trading classes

Saptagram, in its days of glory, attracted many *Gandhabaniks*, *Suvarnabaniks*, *Tambulibaniks* and *Kansabaniks* and the prosperity of the last two classes led to the emergence of the Saptagramiya section of the *Suvarnabaniks* and *Kansabaniks* who formed endogamous groups within their respective castes. Nityananda, the closest associate of Sri Chaitanya, preached Vaishnavism among them and converted many to the new faith including Divakar Datta, popularly known as Uddharan Datta Thakur and one of the topmost merchants of the place, who later did much to propagate the Vaishnava faith. Raghunath Das Goswami, a close associate of Sri Chaitanya, was born in 1498 in the village of Krishnapur, supposedly one of the

component parts of Saptagram. He is regarded as one of the *Sada Goswamis* or the six most prominent Vaishnava theologists.

Monuments

Extant remains at Saptagram include a derelict mosque, few tombs, some sculptural pieces, an old tank and scattered bricks on either side of the Grand Trunk Road. Although devoid of a superstructure, the brick mosque is the most important monument which is built in late Pathan style containing terracotta panels decorating its three mihrabs and the side walls. A set of mouldings, closely resembling their counterparts in Hindu temples of pre-Muslim Bengal, running along the lower portion of the outer walls forms an interesting feature of the mosque. An Arabic inscription on a stone slab above the entrance states that the Jama Masjid was built in the reign of Abul Sayid Fakhruddin of Amul (a town on the Caspian Sea) in Ramzan 936 H (May A.D. 1536). Near the south-eastern corner of the mosque are the tombs of Sayid Fakhruddin, his wife and his eunuch. The largest tomb is ornamented with arabesque work, and has an Arabic inscription (now illegible) at the north end. Certain inscribed slabs of basalt, lying *in situ*, speak of the erection of the adjoining mosque by Fakhruddin, another by Tarbiyat Khan in the reign of Mahmud Shah in 861 H (A.D. 1461) and a third by Ulugh Majlis Nur, Commander and Vizier during the reign of Fath Shah in 892 H (A.D. 1492). A place strewn with broken bricks to the east of the G.T. Road is locally called the 'killa' or the fort and further east there is a fairly large tank known as Jahangir's tank.

Places of pilgrimage

Saptagram is a centre of Vaishnava pilgrimage. The *Sripat* (homestead of a leading Vaishnava) of Uddharan Datta Thakur at Saptagram and the *Sripat* of Raghunath Das at Krishnapur, about a mile to the west of G.T. Road, are visited by many Vaishnavas. A fair known as the *Uttarayan* Mela is held annually at the latter place early in *Magh* (January).

SEAKHALA—A large village in Chanditala P.S. situated 11 km. (7 miles) north-west of the thana headquarters and approachable by the Seakhala branch of the Howrah-Amta Light Railway, of which it is a terminus station, while the Ahalya Bai Road passes through it. In 1961 it had a population of 2,888 persons of whom 997 (34.5%) were educated and literate. The village contains two Higher Secondary schools, a post office, a library and an outdoor dispensary. The Seakhala Model School, non-existent now, was founded by Iswar Chandra Vidyasagar on September 5, 1855.

Formerly, the place, situated by the river Kausiki, was known as Sivakshetra from which its present name has originated. It was the seat of the Basu family to which belonged Gopinath Basu who is said to have entered the services of Alauddin Hussain Shah (1493-1519) as a commander of the armed forces and was later elevated to the position of a minister for his wisdom and efficiency in recognition of which the Sultan conferred on him the title of 'Purandar Khan'.

It is said that he built a palace surrounded by a moat but no trace of it remains now.

Uttaravahini Devi

The principal attraction of the village is the deity Uttaravahini, a form of Sakti. According to local legend the goddess, originally facing south, was installed by a Brahmin on the bank of the Kausiki. Once a merchant, attended by a musical party, was sailing by the temple when the goddess asked him to hold the performance in her presence. The merchant refused. His boat sank at once and the angry goddess turned her face to the north (*uttar*) giving rise to her present name 'Uttaravahini'. A deep depression in the bed of the river near the temple is pointed out as *Dinga Dobar Khat* or the spot where the merchant's boat had sunk.

Fairs and festivals

The ceremony held in the middle of *Ashad* (June-July) to commemorate the installation of the deity is the principal festival of the village. Another annual festival associated with Uttaravahini is held on the *Ekadasi* day immediately following the *Durgapuja* (September-October). Both are attended by fairs. Besides, the twelve-day-long musical performance held in April-May in honour of Dharma and the *Gajan* festival occurring in March-April deserve mention.

Location and composition

SERAMPORE SUBDIVISION—Occupying the south-eastern part of the district, the subdivision is bounded by the Bhagirathi on the east, Chandernagore subdivision on the north, the Damodar on the west and the Uluberia and Sadar subdivisions of Howrah district on the south. Almost linear in shape, it extends from east to west comprising the police stations of Serampore, Uttarpara, Chanditala and Jangipara and covers an area of 257.6 sq. km. (160 sq. miles).

Physical features

It is intersected by many minor streams with swamps lying in between them. The soil consists of silt deposited by the Bhagirathi, the Damodar and their distributaries. The country is low and flat but rises gradually towards the west while the streams flow generally from north and north-west to south and south-east. The water courses mostly lose their currents after the rains leaving numerous stagnant pools.

Rural and urban areas

Of the 160 sq. miles of the subdivision, rural areas, divided into 270 *mauzas*, cover 147.5 sq. miles and urban areas 12.5 sq. miles. It has five municipal towns, viz. Uttarpara-Kotrung, Konnagar, Rishra, Serampore and Baidyabati. The only non-municipal town is Nabagram Colony.

Population and people

In 1961 the subdivision had a population of 5,73,311 persons of whom 3,08,471 lived in villages and 2,64,840 in towns. 71,255 persons belonged to the Scheduled Castes and 7,634 to Scheduled Tribes. Hindus (including members of the Scheduled Castes) numbered 4,97,293 and Muslims 73,973.

Density of population

Of the four subdivisions in the district, the highest population density is found here with 3,583 persons living on an average per sq. mile. The number of towns, namely five, is also the highest in this

subdivision where the adjoining rural areas also exhibit marked urban characteristics. The urban population density of the subdivision is the highest in the district with 21,238 persons per sq. mile. The most densely populated towns are Serampore, Rishra and Uttarpara (exclusive of Kotrung) having population densities of 40,318, 30,828 and 26,415 per sq. mile respectively. The rural portions of the urban thanas have densities varying from 3,801 in Uttarpara to 1,492 in Serampore. The two entirely rural police stations, viz. Chanditala and Jangipara, have population densities of 2,645 and 1,532 respectively.

Education

In 1961 educated and literate persons in the subdivision numbered 2,40,371 (41.9%) of whom 1,62,378 were males (51.7% of the male population) and 77,933 females (30% of the female population). There are four degree colleges located at Serampore, Rishra, Nabagram colony and Uttarpara. An account of the Baptist Mission college at Serampore has been given in Chapter XIII on Education and Culture.

Agriculture and industry

Manufacturing industries other than household industries constitute the principal occupation of the subdivision engaging 73,936 persons (12.7% of the subdivisional population). Next comes agriculture in which 44,973 persons are employed (7.8% of the subdivisional population). The heavy and large-scale industries are concentrated in the urban belt bordering the Bhagirathi while the rural hinterland to the west is given to agriculture. Paddy, jute, pulses and potatoes are the major crops. There are many cold storages at various places in Serampore, Chanditala and Jangipara police stations. Bricks, tiles and *soorki* are manufactured along the banks of the Bhagirathi and the Bally *Khal*. The subdivision has a tradition in handloom cotton weaving carried on at Serampore town, Rajbalhat, Jangipara, Antpur and Mandalika in Jangipara P.S. and Begampur and Kharsarai in Chanditala P.S. Products of Rajbalhat, the largest centre, are known for uniformity and fineness of texture as also for the artistic borders while the artisans of Kharsarai specialize in striped *saris*.

Transport and communication

The subdivision is well served by railways and road communications. The main line, the Howrah-Burdwan chord line and the Tarakeswar branch of the Eastern Railway and the Champadanga and Seakhala sections of the Howrah-Amta Light Railway cover large areas of the subdivision while the Grand Trunk Road and the Ahalya Bai Road pass through its eastern and central parts. Besides, a number of all-weather metalled roads, mostly provided with regular bus services, connect various parts of the subdivision.

Health services

The Walsh Hospital at Serampore is the biggest in the subdivision. Other important general hospitals are the Sevasadan at Rishra and the State Hospital at Uttarpara. There is a Tuberculosis Hospital and a Chest Clinic-cum-T.B. Hospital at Serampore. Two Primary Health

Centres are located at Chanditala and Jangipara. There are also subsidiary health centres, maternity and child welfare centres, charitable and ordinary dispensaries at various places in the subdivision.

Monuments

Fine specimens of mediaeval Bengali temple architecture exist at Antpur, Rajbalhat, Kotalpur, Harirampur, Purba Govindapur and Jangipara in Jangipara P.S., Baksa and Barijhati in Chanditala P.S., Ballabhpur within Serampore town and at Uttarpara, Konnagar, Mahes and Rishra. Furfura in Jangipara P.S. contains a number of mediaeval mosques and tombs while some Danish edifices, including the college building and the St. Walsh Church, exist at Serampore.

Places of pilgrimage

Places of Hindu pilgrimage include the Radhaballabh temple at Ballabhpur, the Jagannath temple at Mahes (both within Serampore town) and the Uttaravahini temple at Seakhala (Chanditala P.S.). Antpur in Jangipara P.S. is noted for its associations with Sri Ramakrishna, his wife Sarada Devi and Swami Premananda. Furfura is a renowned centre of pilgrimage of the Muslims.

Festivals

The *Rathajatra* of Jagannatha at Mahes held in the month of *Ashad* (June-July) is the most important festival of the subdivision. The *snanjatra* of the same deity and the annual festival of Devi Uttaravahini at Seakhala also deserve mention.

SERAMPORE—Headquarters of the subdivision of the same name situated on the Bhagirathi in 22°45′ N and 88°21′ E about 20 km. (12½ miles) north of Calcutta. It can be reached *via* the main line of the Eastern Railway as also along the Grand Trunk Road passing through it. Serampore municipality, constituted in 1865, was originally divided into four wards, viz. Chatra, Serampore, Mahes & Rishra, and Konnagar. In 1915 Rishra and Konnagar were separated to form, firstly, a new municipality and then two municipalities. Serampore's municipal limits encompass an area of 5.88 sq. km. (2.27 sq. miles) wherein are located 4 cotton spinning and weaving mills, a jute mill, a cotton weaving mill, a foundry, a pharmaceutical works, a glass manufacturing factory, a linen lining manufacturing factory and a paper bag factory. As the subdivisional headquarters it contains the usual complement of public offices and has 9 High and Higher Secondary schools a college of Textile Technology, the Serampore College, the Theological University, 12 libraries including the Serampore Public Library, a public hall named Rabindra Bhavan for cultural activities, 3 hospitals and 5 post offices. The educational and cultural institutions of the town have been discussed in Chapters XIII and XV.

Serampore's population nearly doubled between 1872 and 1911, the numbers being 24,440 and 49,594 respectively. After the separation of Rishra and Konnagar, the number of residents was 33.197 in 1921 which rose to 39,056 in 1931, 55,339 in 1941, 74,324 in 1951 and 91,521 in 1961 At present it is the most densely populated town in the district with 40,318 persons per square mile. In 1961 workers

numbered 32,242, or 35.2% of the population, of whom 17,532, or 54.4%, were engaged in manufacturing other than household industries forming the largest occupational group. This feature coupled with the large excess of males over females (53,479 and 38,042 respectively in 1961) prove the influx of migrant wage-earning labour, a common phenomenon in all industrial towns. The number of educated and literate persons in 1961 was 49,050, or 53.5% of the total population.

Formerly Serampore was an important centre of handloom weaving. The vitality of the industry was attributed to the use of an improved handloom which was introduced here from Chandernagore in the third quarter of the 19th century. The industry is still carried on but on much reduced scale.

Serampore

The Anglicized name Serampore (Srirampur in Bengali) is of comparatively recent origin. In 1752 Raja Monohar Roy of Sheoraphuli installed an image of Sri Ramachandra at Sripur, now a part of the town, and gifted the village to the deity along with the adjacent hamlets of Mohonpur and Gopinathpur. The name Srirampur stemmed from the deity Sri Ramachandra Jiu. In 1757 the Danes changed the name of the place to Fredericknagar.

History

Serampore was originally a colony of the Danes, an account of whose regime has been given in Chapter II. It was ceded to the British by the treaty of 1845 when the town, small in extent, had the *mahals* of Serampore, Akna and Piarapur attached to it for which the Danes paid to the Sheoraphuli Raj an annual rent of *sicca* Rs. 1,601.[46] In 1847 the subdivisional headquarters was transferred from Dwarhatta to Serampore.

Danish buildings

The house of the Danish Governor with its large compound now houses the courts and administrative offices. The massive main gate leading to the compound is surmounted by a crown and the Danish royal emblem—F.R.VI (Frederick Rex VI).[47] Other Danish buildings in the neighbourhood are the Roman Catholic Church, the St. Olaf Church and the sub-jail. The Roman Catholic Church was erected in 1776 replacing a smaller chapel built in 1764. The Protestant church, dedicated to St. Olaf, has a lofty steeple and was built in 1805, its gateway bearing the monogram of Frederick VI of Denmark. A number of old cannons used by the Danes to fire salutes to dignitaries now line the boundaries of a small park in front of the church. The old Danish jail has now become the local sub-jail. The Danish cemetery situated at the junction of Dr. T. P. Bhattacharyya Street and Govinda Bhattacharyya Lane has two beds, one for Catholics and the other for Protestants, and contains tombs dating back to 1781.

Mission buildings

An account of the activities of the Serampore missionaries, especially of Carey, Marshman and Ward, has been given in Chapter XIII as also in an Appendix entitled 'Christian Missionaries in Hooghly

District' at the end of this volume. The most important edifice left by them is the one housing the Serampore College, founded in 1818, about which the following description is given by J. C. Marshman, a son of Dr. Marshman. "The centre building intended for the public rooms was 130 feet in length and 120 feet in depth. The hall on the ground floor, supported on arches, and terminated at the south by a bow, was 95 feet in length, 66 in breadth, and 20 in height...the hall above, of the same dimensions and 26 feet in height, was supported by two rows of Ionic columns. ...Of the twelve side rooms, above and below, eight were of spacious dimensions 27 feet by 35. The portico, which fronted the river was composed of four columns, more than 4 feet in diameter at the base."[48] The college has a rich library and museum containing relics of the Serampore missionaries and their activities.

Henry Martin's Pagoda

Within the grounds of the Howrah waterworks on the riverbank stand two buildings known as 'Al-din House' and 'Henry Martin's Pagoda'. The former is said to have been built by Muslims during the Mughal period to propagate their religion (*din*) and the latter, originally an *atchala* shrine, was formerly the temple of Radhaballav which was purchased by Rev. David Brown after it was abandoned for riparian erosion. Henry Martin, the renowned missionary, lived in it for some time and converted it into a Christian chapel. Thereafter, a distillery was started here producing rum under the 'Pagoda' brand. All this accounts for the peculiar name by which this erstwhile Hindu temple, one of the oldest of its kind in West Bengal, is now called. The structure has been recently repaired by the State Government.

Mission cemetery

Not far from the railway station on a side-lane branching off from the Grand Trunk Road is the Mission cemetery containing the graves of Carey and his family, the tombs of the Marshmans and those of Ward and Mack 'the beloved associate'.

Madanmohan temple

In the middle of the 18th century a few South Indian Vaishnavas belonging to the Ramanuja sect established an *Ahkra* (monastery) and a temple of Madanmohan on the ground now occupied by the Walsh hospital. After some time they left the *Akhra*. About 1836, following the decision to establish the hospital on the site of the *Akhra*, the deity was removed from the shrine and kept under private care. The Danish government had sanctioned an annuity of Rs. 120 for the maintenance of the deity which was stopped by the British who paid instead a lump grant of Rs. 10,000 with which the present *atchala* temple of the deity was built.

Goswami family

The Goswamis of Serampore, a renowned zemindar family of the district, hailed from Patuli, an old place on the Bhagirathi in Burdwan district, which was also the original home of the Bansberia Raj and Sheoraphuli Raj. Ramgovinda Goswami (Chakravarti) received grants of land from the Sheoraphuli Raj and the Raja of Vishnupur appointed

him as *sebait* of the deities Radhamohan and Gopal with further grants of rent-free lands. His youngest son Harinarayan was the dewan of customs under the Danish East India Company and amassed a large fortune. His son Raghuram was banian of the great firm of John Palmer. He also traded on his own account and was a big shareholder of the Union Bank. Raghuram purchased extensive zemindaris and acquired such wealth that when the Danes made over Serampore to the English in 1845, he offered to purchase it for twelve lakhs of rupees. Raja Kisorilal Goswami of this family was chairman of the Serampore municipality and a member of the Executive Council of Bengal. Tulasi Goswami, the last of the eminent sons of the family, was a leading figure of the Indian National Congress and the Swarajya Party founded by C.R. Das and Motilal Nehru. A noted orator and parliamentarian, he left his mark as member of the Provincial and Central legislatures.

Ballabhpur

Ballabhpur is a quarter within the Serampore municipality and is so named after the temple of Radhaballabh, a fine *atchala* structure and one of the biggest of its kind in the district. Legend has it that about 300 years ago one Rudraram Pandit of Chatra, Serampore renounced the world and entered upon a life a penance and austerities at Ballabhpur which then lay in a deep forest. Pleased with his devotion Lord Krishna appeared before him in the form of a mendicant and told him to instal the image of Radhaballabh which should be carved from the keystone of the doorway to the private chamber of the Sultan of Gaur. On his arrival at Gaur Rudraram found that the Sultan, mystified at the inauspicious phenomenon of the same piece of stone exuding drops of water, had ordered for its removal. Rudraram had no means to carry the huge block back with him and was advised in a dream to leave it in the neighbouring river and return to Ballabhpur which he did. Presently the stone floated all its way to the Ballabhpur ghat when it was picked up and three images of Krishna were fashioned from it. The one installed at Ballabhpur was named Radhaballabh, the second taken to Khardaha is worshipped as Shyamsundar and the third at Sainboua is known as Nandadulal. The story of this strange divine dispensation attracted worshippers with whose help Rudraram constructed about A.D. 1677 the original temple of the deity which later came to be known as St. Martin's Pagoda and has been described earlier. The present shrine was built by Nayanchand Mallik of Calcutta in 1764. The dual images of Radhaballabh and Radhika are placed in the sanctum while those of Jagannath, Subhadra and Balarama are worshipped in a side chamber. *Rathajatra* of Jagannath, held in the month of *Ashad* (June-July), is the principal festival when a fair is held here. Formerly, the image of Jagannath enshrined at Mahes used to be brought to the temple of Radhaballabh during the car festival and kept there for a week until the return journey. The practice has been discontinued

since 1850 owing to misunderstandings between the *sebaits* of the two temples. The Ballabhpur temple has now its own set of image of Jagannath, Subhadra and Balaram.

Mahes

At Mahes, another quarter within the Serampore municipality, stands the temple of Jagannath famous for the annual festivals of *Rathajatra* and *Snanjatra*. According to prevailing legend the original shrine of Jagannath was founded by one Dhruvananda Brahmachari who, while on a pilgrimage to the Jagannath temple at Puri, was asked by the god in a dream to return to Mahes where he promised to appear. Back at Mahes, Dhruvananda presently found the sacred log of wood floating down the Bhagirathi from which he fashioned the image of Jagannath and installed it in a temple. The last of Dhruvananda's descendants having died without an heir, the services of the deity were entrusted to Kamalakar Piplai who appears to have been born in a zemindar family of Khalijuli in the Sunderbans about 1492 and was a close associate of Sri Chaitanya. According to Vaishnava texts, he was one of the *Dwadasa-gopalas* or the twelve closest associates of the Master.[49] Owing to his association with Mahes the place is considered as a *Sripat* by the Vaishnavas. Descendants of Kamalakar continue to be the *sebaits* of the deity to this day. The original temple of Jagannath was abandoned due to the encroachment of the river and the present shrine, a *sikhara* structure with a detached *mandapa* (assembly hall) situated within an enclosed compound, was built by Nayanchand Mallik of Calcutta in 1755.

Rathajatra

The *Rathajatra* of Mahes is the largest festival of its kind in India outside Puri. The approximate date of its commencement is not known nor is there any information about the person who first built the wooden *ratha*. The present steel structure of the chariot was presented by Krishnachandra Basu in 1885. On the day of the festival, a lakh of people on an average collect on and around the Grand Trunk Road along which the car is drawn to the aunt's house of the deity a little distance away where it stays for a week, the return journey (*ultorath*) taking place on the eighth day. On this occasion a large fair is held along the stretch of the G.T. Road providing an opportunity to traders and craftsmen from far and near to sell their goods. The *Snanjatra* of Jagannath, held in the month of *Jyaistha* (May-June), is attended by another fair which attracts a large number of people.

SINGUR—A non-municipal town and headquarters of the police station of the same name, situated 11 km. (7 miles) west-northwest of Baidyabati with which it is connected by an asphalt road. The Tarakeswar branch of the Eastern Railway has a station here. The Rural Health Unit and Training Centre (incorporating the Demonstration Centre of the All-India Institute of Hygiene and Public Health, Calcutta) accounts for the importance of

the place.* Formerly, Singur was a centre of Sanskrit learning.

Some identify Singur with Sinhapura, the legendary capital of Sinhabahu, father of Vijaya. This supposition has been examined in Chapter II. Singur finds mention in the *Digvijaya-prakasa*, a 16th century Sanskrit text, as lying to the east of Haripal. The Malliks of Singur-Apurbapur is the most renowned local family. Rajendranath Mallik of this family was an eminent physician in Calcutta. His son Surendranath was the first non-official Chairman of the Calcutta Corporation and the minister for Local Self Government in the Government of Bengal. He established a health unit in the village which formed the core of the Rural Health Unit and training centre mentioned above. The Barmans (Wahi) of Singur were important zemindars. Gopinath, the founder of the family, left his native place Seringaon in Punjab and settled here in the middle of the 18th century. His son Dwarikanath purchased large estates and built several temples including the shrine of Radha Govinda and a complex of seven Siva temples.

Temples

Singur contains a number of temples of which the shrine of Bisalakshi at Singur-Purushottampur (A.D. 1731) and the *Dakate* Kali temple of Singur-Mallikpur are interesting for their terracotta ornamentations. The goddess in the latter temple is said to have been installed by dacoits who once terrorized the region.

Sinhalpatan & Sinherbheri

The villages of Sinhalpatan and Sinherbheri to the north of Singur are reported to contain ruins of ancient structures and embankments which are popularly associated with the capital of king Sinhabahu.

SOMRA—A village in Balagarh thana situated about 1.6 km. (1 mile) north-west of Balagarh with which it is connected by an asphalt road carrying regular bus services. Somrabazar, a station on the Bandel-Barharwa Loop line of the Eastern Railway serves the village. In 1961 it had a population of 1,377 persons of whom 614 (44.5%) were educated and literate. The village contains a Higher Secondary school, a post office and a library.

Somra was a flourishing place in the middle of the 18th century when Dewan Rai Rayan Ramchandra Sen and Dewan Ramsankar Roy settled down here. The former was a high ranking officer under the Nawabs of Bengal but he reportedly developed bitter relations with Maharaja Krishnachandra of Nadia which led him in 1742 to seek shelter in Somra, then a part of the zemindari of Brindabanchandajiu of Guptipara. Ramsankar is credited with the construction of a number of temples in the village including the temples of Jagaddhatri and Mahavidya built in 1755 and 1765 respectively. The first shrine is a *Navaratna* structure while the second has an unusual pyramidal roof rising in three stages the lowermost of them having

*This institution has been described in Chapter XIV on Medical and Public Health Services.

four small turrets set at the corners. Ruins of the palatial houses of Ramsankar and Ramchandra still exist in the village.

Sukharia

Sukharia, a village to the south-east of Somra is the place of residence of the Mitra-Mustouphis, a collateral branch of the well-known Mustouphi family of Sripur and an important zemindar family of the district. The family was founded by Anantaram Mustouphi, brother of Raghunandan, the founder of the Mustouphi family of Sripur (see Sripur). Anantaram earned the displeasure of Maharaja Krishnachandra of Nadia and left his native village Ula (Birnagar) in Nadia district and came to live here.

Monuments

The principal monuments consist of the temples of Anandabhairavani, Harasundari and Nistarini. The first, a large *Panchavimsatiratna* (twentyfive-towered) shrine displaying profuse terracotta ornamentation on the facade and the side walls, was built by Bireswar Mustouphi in 1813. It is about 70′ high and has 14 ancillary Siva temples arranged in 2 rows, 7 in each, flanking the front yard. The derelict temple of Harasundari Kali, originally a *navaratna* structure, was built by Dewan Ramnidhi Mustouphi in 1813. There are 14 minor Siva temples in its precincts distributed in the same manner as in the preceding temple. In 1847 Kasigati Mustouphi built another *navaratna* temple enshrining Nistarini Kali.

SRIPUR—A large village in Balagarh P.S. situated near the Balagarh railway station on the Bandel-Barharwa Loop line of the Eastern Railway with which it is connected by a kilometre-long metalled road. In 1961 the village had a population of 3,540 persons of whom 1,402 (42.4%) were educated and literate. Here are located a post office, a library and a hospital.

The place was originally known as Atisaora and appears to have been visited by Sri Chaitanya. Raghunandan (see Sukharia) received rent-free lands in the village from the Raja of Bansberia and came to live here in A.D. 1708. He also received similar grants from Maharaja Krishnachandra of Nadia in 1730.[50] He purchased other estates, changed the name of the place to Sripur and built his residence and a *Chandimandap* (pavilion for worshipping goddess *Chandi*) closely imitating those at his ancestral home at Ula. The *Chandimandap* forms the main attraction of the village. Elaborate wood carvings depicting figures and floral motifs on its pillars, beams, brackets etc. amply testify to the high skill of the carpenters engaged on the work. Raghunandan was a noted Sanskrit scholar and astronomer of his time. The *Dolmancha* of the deity Govindajiu which he installed was built by the wife of Rudraram Mustouphi in 1746 while the present temple of the god was erected by Nidhiram Mustouphi in 1797.

Balagarh

Balagarh, a village to the south of Sripur, is an old settlement of the *Radhiya Kulin* Brahmins and appears to have been named after the *garhbari* (house encircled by a moat) of Balaram Thakur who

was once a very influential man of this area.* It is shown in Rennell's atlas as lying on the Bhagirathi but is now about a mile inland. Formerly, boat building was an important industry of the place which is still carried on in a reduced scale. The railway station for the village bears the same name and is on the Bandel-Barharwa Loop line of the Eastern Railway.

Kaliagarh

Kaliagarh (or Keiegarh) to the south of Balagarh contains the shrine of Siddhesvari Kali, a locally well-known deity, said to have been installed by dacoits. The place is also known as *Balayopapitha* as a *balaya* (bangle) from the dismembered body of Sati is supposed to have fallen here. The name of the *Bhairava* (the male consort) is Mahakala whose temple stands in front of the shrine of the goddess.

Jirat

Jirat, a village to the south of Kaliagarh, is the place of residence of a number of important families including the Chakravartis (Kanjilal), Goswamis and Mukhopadhyays. Abhayram Sarvabhouma, the founder of the Chakravarti family, settled here in the middle of the 17th century with his friend Ramkanai Goswami. Abhayram was a Sakta while Ramkanai was a devout Vaishnava belonging to the line of Ganga Devi, daughter of Nityananda. They introduced the two faiths in Jirat which subsequently became a stronghold of both. The Chakravarti family's affluence stemmed from its trade relations with the Portuguese, the Dutch and the English. Fakirchand Chakravarti of this family is credited with the construction of two Siva temples at Jirat in 1841. From the Mukhopadhyay family came Sir Asutosh Mookerjee, a brief life sketch of whom has been included in the appendix 'Eminent Sons of Hooghly' at the end of this volume. His equally famous son Shyamaprasad Mookerjee was an eminent educationist and a notable figure in Indian politics.

TARAKESWAR—A non-municipal town and the headquaters of the police station of the same name, Tarakeswar is a renowned place of pilgrimage and the greatest centre of the Saiva sect in West Bengal, situated 33.6 km. (21 miles) west-north-west of Baidyabati with which it is connected by an asphalt road. The place is conveniently reached from Calcutta by the Tarakeswar branch of the Eastern Railway starting from the Sheoraphuli junction station (see Sheoraphuli). It is an important centre of trade and commerce handling large quantities of rice, paddy and potatoes. In 1961 it had a population of 8,528 persons of whom 3,562 (41.7%) were educated and literate. Here are located two Higher Secondary schools, two post offices, four libraries, a hospital, a large cold storage and several private rest houses for the visiting pilgrims. The *Jagannath Asram Sanskrit Mahavidyalaya*, an institution for higher studies in Sanskrit, is run by the Tarakeswar Estate.

**Bala* is the abbreviated form of Balaram and *garh* indicates the fort-like house encircled by a moat.

Objects of interest

The chief object of interest is the temple of Taraknath, an *atchala* structure with a *natamandir* in front. The present temple was built by Gobardhan Rakshit of Patul-Sandhipur near Seakhala and the *natamandir* by Chintamani De of Howrah. Close by are the subsidiary shrines of Kali and Lakshmi-Narayana. *Dudhpukur*, a tank to the north of the main temple is credited with powers of fulfilling the desires of the devout who takes a dip in it. The chief priest of the establishment has his residence and offices in a mansion by the tank.

Fairs and festivals

Pilgrims visit the temple throughout the year, especially on Mondays, but the principal festivals, attended by fairs and huge crowds of devotees, are held on the occasions of *Sivaratri* and *Gajan*, the former taking place on the night of the fourteenth *tithi* of the dark fortnight of *Phalgun* (February-March) while the latter lasts for five days ending on the last day of *Chaitra* (middle of April). A common sight on these occasions is the endless stream of pilgrims who bathe in the Bhagirathi at Baidyabati and walk the 22-mile long route to the temple with Ganges water collected in small pitchers suspended from the ends of decorated poles carried over their shoulders. Throughout the month of *Chaitra* many devotees embrace *Sannyasa* to propitiate Taraknath by putting on saffron-coloured clothes, fasting during the day and taking their meals only after sunset. The enormity of the gathering on the occasion of the *Gajan* festival makes a broad regional division of the visitors a necessity. The fair on the first four days of the eleven over which it is held is primarily earmarked for pilgrims from the south coming mostly from Midnapur, Howrah, southern parts of 24-Parganas and Arambagh subdivision and is called the *Dakhne Mela*. The *Purbe Mela*, generally attended by pilgrims from eastern districts like Murshidabad, Nadia and north 24-Parganas, starts on the fifth day while visitors from Howrah, Hooghly, Calcutta and Burdwan come after the ninth day. The eighth day is set apart for the pilgrims from Ramnagar, a nearby village. *Nil Utsava* or the marriage ceremony of Siva is performed on the ninth day, a spectacular procession and fireworks providing the highlights. Other rituals connected with *Gajan* include jumping on fire or on thorns by the devout. On the last day the *Sannyasis* deposit their saffron-coloured clothes before the god and offer prayers, fasting both day and night.

The month of *Sravana* (mid-July to mid-August) is auspicious for Siva when celebrations are held on each Monday. The *Dol* ceremony of Lakshmi-Narayana taking place in *Phalgun* (February-March) is also an important festival of Tarakeswar.

Legend and history

The legend common all over India of cows shedding their milk secretively in unfrequented parts of forests leading to the discovery of godheads is also told about the revelation of the Siva *lingam* at Tarakeswar. The discoverer in the present case was one Mukunda Ghose, a member of the *Gop* (milkman) caste and cattle-keeper of

Raja Vishnu Das, the Chhatri zemindar of Baligari, not far from Tarakeswar. The Raja and his brother Bharamalla failing in their attempt to dig up the *anadi* (bottomless) *lingam*, built a temple on it.

Shrine and *Math*

Legend apart, Tarakeswar, according to historical evidence, appears to have been a Saiva centre prior to Vishnu Das's time. The place finds mention in the *Sivayana* of Ramkrishna Das, who, according to Dineschandra Bhattacharyya, flourished in the first half of the 17th century[51] while Bharamalla gifted rent-free lands to Taraknath only in 1729. In the same deed Bharamalla appointed Mayagiri Dhumrapan, a *Dasanami Saiva Sannyasi*, as the *Mohanta* (chief priest) of the Tarakeswar *Math* (religious establishment). It is probable that this Saiva centre was taken over and improved by Vishnu Das and Bharamalla, Chhatri zemindars of Baligari who had come there from Ayodhya around the close of the 17th century. Under the patronage of Bharamalla, who appears to have held the zemindari after the death of his brother, the *Dasanami* Saivas assumed control of this centre with subsidiary seats at Guptipara, Nayangarh Bhotbagan, Baidyabati, Garh Bhavanipur, Santoshpur and Chaipath. The *Mohanta* of Tarakeswar became the *Mahamandalesvara* (head) of the *Mandali* (assembly) of *Mohantas* stationed at the other places.

It was proved in the well-known case against *Mohanta* Satis Giri that the *Dasanamis* were Vedic *Sannyasis* belonging to the school of Sankaracharyya.[52] But many of the *Mohantas* of Tarakeswar reportedly led irreligious lives. *Mohanta* Srimanta Giri was sentenced to death in 1824 for having murdered the paramour of his mistress. *Mohanta* Madhav Giri was convicted for adultery in the famous case of Elokesi that stirred Bengal in the third quarter of the 19th century. In this background a *satyagraha* movement was launched in 1924 under the leadership of Chittaranjan Das, Subhas Chandra Basu and Swami Viswananda to eradicate the evils associated with the organization. A suit was simultaneously filed in the court of the District Judge, Hooghly challenging the rights of the *Mohanta* which resulted in the verdict that the *Math* was a public endowment to be managed henceforth by a committee consisting of representatives of various public organizations and the Government. The *Mohanta* was allowed to remain as the executive head functioning under the directions of the managing committee. The committee was also given the power to remove a *Mohanta*. The old practice of succession to *Mohantaship* by the disciple of the outgoing *Mohanta* was abolished.

TRIBENI—An ancient place of Hindu pilgrimage within Bansberia town in Magra P.S. Tribeni (*tri*—three and *beni*—braids) takes its name from the three streams meeting here—the Bhagirathi flowing to the south, the Saraswati to the west and the Jamuna (or Kanchrapara *Khal*) to the east. This accounts for the great sanctity of Tribeni which is also allegorically called *Muktaveni* (open-braided) to dis-

tinguish it from *Yuktaveni* (joint-braided) or the confluence of these three rivers at Prayag (Allahabad, U.P.).

Antiquity

Archaeological evidence and references in old texts establish the antiquity of the place. Dhoyi, the court poet of Lakshmana Sena, mentions it in his *Pavanadutam* composed in the last quarter of the 12th century. Pre-Muslim ruins testify to its being a centre of religion and culture in the Pala-Sena period.

History

The political history of the place in the mediaeval period has been narrated in Chapter II and in the article on Saptagram in the present chapter. Owing to its sanctity and its situation at the junction of three important streams, Tribeni was a halting place for boats passing up and down the rivers. It thus finds mention in many old Bengali texts including the *Manasamangal* of Bipradas Piplai (A.D. 1495) and the *Chandimangal: Dhanapati Upakhyan* of *Kavikankan* Mukundaram Chakravarti (*circa* A.D. 1600). In 1682 William Hedges passed by 'Trippany' on his journey by boat to and from Kasimbazar and in 1717 his nephew, Robert Hedges, received near 'Trevinny' the English embassy on its return from the court of Farrukhsiyar. The Dutch Admiral Stavorinus also visited 'Terbonee' in 1770.

Monuments

A mound overlooking the Bhagirathi contains the principal monuments including an *astana* comprising several tombs and a ruined mosque a little to its west. The *astana* is a rectangular roofless structure consisting of two chambers standing on a basalt basement with stone walls. The eastern chamber houses four tombs believed to be those of Zafar Khan Ghazi, his two sons Ain Khan Ghazi and Ghain Khan Ghazi, and the wife of his third son Bara Khan Ghazi. The tombs of Bara Khan and his two sons Rahim Khan and Karim Khan are in the other enclosure. The eastern enclosure is provided with four doorways, the lower portions of the door jambs being decorated with miniature temples enshrining figures of goddesses flanked by stunted *Yaksha* figures, all much defaced now. Near the eastern and northern entrances, are damaged stone sculptures of Vishnu, Lakshmi, Saraswati, Rama, Krishna, Nrisingha, Varaha etc. In some cases the panels are placed upside down. A close examination of the walls reveals that they contain large stone sculptures with their fronts accommodated within the depth of the walls, the back of the slabs being visible from outside. The outer walls of the western enclosure are variegated by a set of three horizontal mouldings cut by vertical dentils at the base and by another set of mouldings at the top, while projecting pilasters divide the walls into several vertical sections. The inner walls of this chamber contain several inscriptions on black basalt in proto-Bengali script apparently intended to describe sculptural panels depicting scenes from the Ramayana, Mahabharata and Bhagavata.[illegible] These inscribed basalt pieces must have originally formed pedestals of sculptural panels and were later used haphazardly in the present construction. The Hindu sculptures in the

walls of the two enclosures testify to the existence here of a profusely decorated temple, probably a Vaishnava shrine. R. D. Banerji thought that the eastern chamber was the sanctum of the temple while the western enclosure formed its *mandapa*.[54] Within the latter lie a miniature *sikhara*, probably an *angasikhara*, and a highly mutilated sculpture with an Arabic inscription on the reverse. The sculpture shows the feet of a standing figure with a coiled body of a snake behind and several snake coils on the pedestal which Banerji identified as the image of the 23rd Jain pontiff Parsvanatha.[55]

The mosque beyond the western enclosure was also built with materials available from earlier Hindu temples. The plan of the structure is rectangular extending from north to south. The domes are made up of successive rings of stone, the diameter of each layer being a little less than that of the layer below and the whole is capped by a circular stone covering the small aperture at the top.[56] The stunted pillars supporting the domes are arranged in two rows and are unusually thick. At the base of the pillar standing second from the north in the inner row can be found a row of Buddha figures sitting in *Bhusparsa mudra*. At present there are four *mihrab* niches on the back wall. The second *mihrab* from the north is framed by door jambs and lintels obtained from an earlier temple while the third is flanked by a *navagraha* panel on the right and the stele of an image on the left and has the pedestal of another image at the top.

"Six old inscriptions in Arabic have been found on the western wall of the mosque, and two in the second enclosure of the *astana*. The most interesting of the inscriptions are one in the mosque dated 698 H. (1298 A.D.), recording the erection of a mosque by Zafar Khan (Ghazi), the Turk, and another in the enclosure, dated 713 H. (1313 A.D.), recording the erection of a *madrasa* named *Darul Khairat* (house of benevolence) by Khan Muhammad Zafar Khan in the reign of Firuz Shah. The inscriptions are in black basalt with the letters raised, and the characters are mostly in Tughra."[57]

To the north of the junction of the Saraswati with the Bhagirathi lie the ghat of Tribeni and a little to its west is a group of small temples surrounding the one of Benimadhava. Flanking the stairs of the ghat are four stone images assignable to the Pala period representing Brahma, Ganga, Hara-Gouri and Ganesa.

Sanskrit learning

Tribeni is one of the oldest seats of Sanskrit learning in mediaeval Bengal specializing in *Nyaya*, *Smriti* and *Jyotisha*. The local scholars formed the Tribeni *Samaj* which commanded wide esteem. Chandrasekhar Bachaspati, who flourished about the second half of the 17th century, was one of the greatest scholars of *Smriti* of his time. His nephews, Bhavadev Nyayalamkara and Rudradev Tarkabagis, also acquired great renown. The former composed *Tirthasara* in 1729 while the latter wrote a commentary on *Probodha Chandrodaya* known as *Roudri Tika* after his name.[58] Rudradev's son Jagannath Tarka-

panchanan (1694-1807) was one of the greatest Sanskrit scholars of Bengal with a vast erudition in *Tantra*, *Purana*. *Smriti*, *Sahitya*, *Alamkara*, *Ayurveda* and particularly in *Nyaya* and taught these subjects in his *tol* at Tribeni.[59] He also possessed profound knowledge of *Veda*, *Vedanta*, *Samkhya* (*Darsana*), and *Patanjali* (*Vyakarana*).[60] His learning exalted Tribeni to an eminence as a centre of Sanskrit studies which overshadowed the glory of Nabadwip. Commenting on his scholarship Raja Rammohan Roy observed, "Jagannath was universally acknowledged as the foremost literary character of his day, and his authority has nearly as much weight as that of Raghunandana."[61] In his well-known work 'An Account of Writings, Religion and Manners of the Hindoos,' Mr. W. Ward extols the versatility of Jagannath's scholarship and admits that his genius had eclipsed the glory of Nabadwip to which he assigns a second place as a centre of Sanskrit learning. His fame as a *Nyaya* scholar reached distant parts of India. *Samanyaniruktipatram*, a paper on *Nyaya* by Jagannath, has been discovered in Madras while *Kavindracharyyasuchipatra*, published from Baroda, contains reference to another paper on *Nyaya* written by him.[62] At the age of ninety-four he took up the compilation of Hindu Laws at the request of Sir William Jones and completed the monumental work in 1792 under the title *Vivadabhangarnava*, the English translation of which called 'Digest of Hindu Law on Contracts and Succession' was published in 1798. For a long time the English courts in many parts of India followed this book to settle disputes under the Hindu Law. Jagannath taught at his *tol* for 90 years and died when he was 113, still mentally active.[63] His descendants were known for their scholarship. With the death of Ambikacharan Vidyaratna in 1912 the long tradition of Sanskrit learning of Tribeni came to an end.

Fairs and festivals

Pilgrims come here throughout the year but *Samkranti*, the last day of a Bengali month, is regarded as most auspicious for a dip in the Bhagirathi. Large crowds visit the place during the *Uttarayana Samkranti* when the sun enters the Tropic of Capricorn as also on the *Poush Samkranti* (middle of January). The festivals of *Baruni* held in *Chaitra* (March-April) in honour of Baruna, the god of waters, and *Dasahara*, held in *Ashar* (June-July) in honour of the Ganges, attract many pilgrims. There are large fairs on all these occasions.

UTTARPARA— The southernmost town of the district and headquarters of the police station of same name situated 27 km. (17 miles) south of Chinsura with which it is connected by the Grand Trunk Road and the main line of the Eastern Railway. Constituted as a municipality as early as 1865, it was merged with the Kotrung municipality in 1964 to form one municipal town called Uttarpara-Kotrung. It covers an area of 7.25 sq. km. (2.8 sq. miles) and has, according to the 1961 Census, a population of 21,132 persons of whom 12,462 (59%) are educated and literate. The relatively small excess of males over females

in 1961 (11,567 : 9,565) testifies to the residential character of the town. Here are located eight primary schools, four higher secondary schools, seven libraries, one degree college, two post offices and a State Hospital. The public library of Uttarpara is one of the foremost of its kind in West Bengal. Originally founded by Jayakrishna Mukherji in an imposing building facing the Bhagirathi, it is now managed by a Board of Trustees. Michael Madhusudan Datta, the famous Bengali poet, stayed in this house for some time before his death in June, 1873. Formerly, Uttarpara was a seat of Sanskrit learning.

The Mukhopadhyay family

Uttarpara is the place of residence of the Mukhopadhyays, an illustrious family of the district. Jayakrishna Mukhopadhyay (1808-1888), who set the family on its road to prosperity, entered service as a regimental clerk at the age of 16, his father being a contractor attached to the same regiment. Both father and son took part in the siege of Bharatpur in 1825 and earned a fortune as their share of the prize money which they invested in landed property. In 1830 he was appointed record-keeper in the Hooghly Collectorate, an office which helped him in judicious purchase of estates put up for auction sale by the Government. He did much for his home town where he founded the public library and a college and was largely responsible for the establishment of a dispensary. His son Pyarimohan was a member of the Provincial and Central Legislative Councils and the President of the British Indian Association for several terms. The titles of Raja and C.S.I. were conferred on him in recognition of his social services.

Kotrung

To the north of Uttarpara is Kotrung which came to form a municipality in 1869 but was merged with Uttarpara in 1964. It is an old place mentioned in *Manasamangal* (A.D. 1495). The population of Kotrung grew precipitately from 14,177 in 1951 to 31,031 in 1961 or a rise of 118.9%. The increase is due mainly to immigration of labourers working in the local industrial establishments and numerous brick-fields as indicated by the growth of males from 8,436 in 1951 to 17,115 in 1961. A *mela* is held at Makaltala locality on the *Poush Samkranti* day (middle of January) in honour of Manik Pir.

Bhadrakali

Bhadrakali, a part of the Uttarpara-Kotrung town, contains the temple of Bhadrakali in the Ramasita Ghat locality which is largely frequented by local people. *Doljatra* occurring in the month of *Phalgun* (February-March) is an important festival of the place which is attended by a fair.

NOTES

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[6] L. S. S. O'Malley and Monmohan Chakravarti—ibid. pp. 246-7.
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[14] Gross—ibid. Vol. II. pp. 477-8.
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[21] Calcutta Review, Vol. VI, p. 415.
[22] Dineschandra Bhattacharyya—*Bāṅgālir Sārasvata Abadān* (in Bengali), Vol. I. Calcutta, 1951. pp. 293-4.
[23] L. S. S. O'Malley and Monmohan Chakravarti—ibid. p. 262.
[24] Benoy Ghose—ibid. p. 468.
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[28] ibid. p. 272.
[29] ibid. pp. 270-1.
[30] ibid. pp. 266-7.
[31] ibid. p. 267.
[32] Sukumar Sen—*Bāngalā Sāhityer Itihās* (in Bengali), Vol-II. Burdwan. 1955. p. 13.
[33] Indian Antiquary, 1891, Vol. XX. p. 419
[34] The Hindu Patriot. 16th June, 1858.
[35-36] Dineschandra Bhattacharyya—ibid. pp. 108-10.
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[51] *Māsik Basumati* (in Bengali), *Bhadra* 1362 B.S. pp. 800-1.
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[53] R. D. Banerji—*Saptagrām* (in Bengali), *Sāhitya Parisat Patrikā*, Vol. XV. Calcutta, 1909. pp. 17-8.
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[57] L. S. S. O'Malley and Monmohan Chakravarti—ibid. p. 256.

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APPENDIX—A

SOME EMINENT SONS HOOGHLY*

SARATCHANDRA CHATTERJEE (1876-1938)

BY

SUBODH CHANDRA SENGUPTA

Saratchandra Chatterjee was born on 15 September 1876 (31 Bhadra, old style, 1283 B.S.) in Devanandapur in Hooghly, the eldest son of Motilal Chatterjee and Bhubanmohini Debi. His childhood and youth were passed in great poverty. Motilal was an unworldly tramp with a restless spirit and a passion for books. He not only read widely but also 'tried his hand at stories and novels, dramas and poems, in short, every branch of literature, but never could finish anything.' Saratchandra imbibed his father's independent and roving spirit, and his early inspiration for literature was a paternal heritage, too. It was because his father was poor and cared little for worldly advancement that Saratchandra's education was neglected. He attended Hooghly Branch School and Primary and Secondary schools at Bhagalpur, where his mother's people—the Gangulies of Halishahar—had settled down in a large joint household. He passed the Entrance examination from the T N. J. Collegiate School, Bhagalpur in 1894 and read for the First Arts examination in the T. N. J. College till 1895. In this year his mother died and his academic education also came to an end. He lived to graduate from the larger university of experience.

Saratchandra's literary talents were revealed early. As far as can be ascertained, of his published writings, the first version of *Chhabi*—called *Koral* then—was written in 1893. At Bhagalpur he became the centre of a literary club, which had, amongst its members, the writer Bibhuti Bhushan Bhatta and his sister, the celebrated woman novelist Nirupama Debi. He was also a gifted actor and a fascinating singer. Later on he became a painter too, but all his paintings were destroyed by fire. Before he left Bhagalpur he had made the first drafts of some of his popular (but yet unpublished) novels, such as *Baradidi*, *Chandranath*, and *Devadas*.

Motilal was always in financial difficulties, which became acute when, after his wife's death in 1895, he moved away from the Ganguli

*Alphabetically arranged according to surnames. For this purpose, Sri Aurobindo has been taken as Sri Aurobindo Ghosh and Sri Ramakrishna as Sri Ramakrishna Paramhamsa.

household and started an establishment of his own with his sons and daughter in the Khanjarpur area of Bhagalpur. In 1896 he sold out his Devanandapur house to his maternal uncle Aghorenath Banerjee for Rs. 225 to pay off a debt. Saratchandra had to give up his studies at the T. N. J. College and go out in search of a living. His first employment was in the Bonaili Raj estate, but his restless spirit did not long brook a dreary routine, and in 1900 he left home as a *sannyasi*. Tramping over many places, he happened to come to Muzaffarpur, where he cultivated the acquaintance of Pramathanath Bhattacharyya, who became one of his warmest friends, and of Shikharnath Banerjee, husband of Anurupa Devi a distinguished woman novelist. Here he got news of his father's death (1902) and hurried to Bhagalpur. After performing the *sradh* ceremonies, he left Bhagalpur—for ever—absolutely penniless. For a few months he stayed with his uncle Lalmohan Ganguli in Calcutta, doing a little hackwork, such as making translations from Hindi, for his out-of-pocket expenses. But he had to find a job and make a living. Upendranath Ganguli, another Bhagalpur uncle, who later on himself made a mark as a novelist, was staying with Lalmohan at this time. He suggested that Saratchandra might try his luck in Burma, for Upendranath's brother-in-law Aghorenath Chatterjee, who was a prosperous lawyer at Rangoon, might make an opening for him. Acting upon this advice, Saratchandra came to Rangoon early in 1903, and with Aghorenath's help secured a job, too. It was about this time that his story *Mandir*, written in the name of uncle Surendranath Ganguli, won the first prize organized by the management of *Kuntalin* hair oil. Saratchandra stayed in Burma for a little more than twelve years, visiting Calcutta occasionally, and he settled down at Rangoon as a clerk in the office of the Deputy Accountant General, Posts and Telegraphs.

From this humdrum existence he suddenly awoke to find himself famous. Some of his early writings appeared in print in Calcutta; the novelette *Baradidi*, which had been serialized in *Bharati* in 1907, was published in book form in 1913. The same year a short story—*Bojha*—was published in *Jamuna* to which, at the instance of uncle Upendranath, he also sent some of his maturer writings, *Ramer Sumati*, *Bindur Chhele*, *Pathanirdesh*. And *Bharatbarsha*, which later on became his chief vehicle of communication, published *Biraj-bou*. These books created a stir in the literary world; he was at once the most popular novelist in Bengal. He had been in poor health for some time and he could now confidently look forward to making a living by his pen. In 1916 he left Burma for good and came back to Bengal. He lived for some time at Baje-Sibpur and then settled down at Panitras, both in the Howrah district. Although he built a house in Calcutta in 1929, it was at Panitras that he stayed most of the time during the last thirteen years of his life.

Next to Rabindranath, he was easily the greatest figure in twentieth century Bengali literature. Although a recluse by temperament, he was drawn to political and cultural movements. He joined active politics as a member of the Congress and was for some years President of the Howrah District Congress Committee. After a short time, he drifted away from the Congress movement dominated by Gandhiji but his interest in the freedom struggle was unbedimmed. He became an ardent supporter of Subhaschandra Bose, whose latest exploit he seemed to prefigure in the novel *Pather Dabi*, which was banned by Government in 1926. Honours now poured upon him from all sides. His novels were dramatized and also filmed. Produced by Sisir Bhaduri, they achieved instantaneous success on the stage. The University of Calcutta awarded him the coveted Jagattarini Medal, and the Dacca University made him a Doctor of Literature. His works were translated into various Indian languages. In 1921 the Oxford University Press brought out the English translation of the first part of *Srikanta*, and on reading its Italian version Romain Rolland hailed him as a firstrate novelist. From 1928 his birthday began to be celebrated widely by his admiring readers, and Rabindranath felicitated him on the sixtyfirst anniversary of this day in 1936. But his health, never strong, was now in decline, and after a long illness, courageously borne, he breathed his last on 16 January 1938 at the age of sixtytwo.

Saratchandra's success as a novelist and short story writer is due, apart from qualities of style and technique, to his abounding sympathy which gave him a rare freshness of vision. Himself a tramp with a touch of Bohemianism, he could easily perceive what is eternally human in the underdog and the reprobate and reveal depths of character in persons condemned by conventional standards which are rigid, superficial and often wrong-headed. Such work, when powerfully written, was bound to be popular not only for its literary merits but also for its point of view which had a special appeal for a reading public that was emerging, as a result of nineteenth century renaissance, into a broad-minded, tolerant humanism. "In Bengal perhaps," said he, "I am the only fortunate writer who has not had to struggle." But although Saratchandra made his first impact as a revolutionary thinker, he was never one-sided in his view of life. There was a core of conservatism in his attitude which made his portraits both large and deep. A forward-looking writer has often to pay the price of his advanced outlook. The revolutionary writer appears to be more and more conservative as the generations pass by, simply because he has himself broadened the vision of his readers. This has happened to Saratchandra, too. Although he has become a classic and a landmark in Bengali literature, there are murmurs of dissent from people unacquainted with the literary and social milieu in which he worked. Modern critical thinking complains that his approach is

sentimental, his technique old-fashioned, that the probelms he emphasized are problems no longer and that he has not gone far enough; in a word, his writings have dated.

In spite of occasional shiftings of opinion, Saratchandra's novels and short stories have become permanent classics because of their creative vitality. The joint family is no longer what it was and old social problems have yielded place to new. But his intimate studies of the intricacies of human relationships and his portraits of the laughter and tears that constitute human life will endure. These are above controversy and will survive changes in literary trends.

Following is a list of books written by Saratchandra. (The year of the first publication of each in book-form is given within brackets).

Baradidi (1913), *Biraj-bou* (1914), *Bindur Chhele* (containing three stories) (1914), *Parinita* (1914), *Pandit Mashai* (1914), *Mejdidi* (1915), *Palli-Samaj* (1916), *Chandranath* (1916), *Baikunther Will* (1916), *Arakshaniya* (1916), *Srikanta* Part I (1917), *Devadas* (1917), *Nishkriti* (1917), *Kashinath* (containing seven stories) (1917), *Charitraheen* (1917), *Swami* (containing two stories) (1918), *Datta* (1918), *Srikanta* Part II (1918), *Chhabi* (containing three stories) (1920), *Grihadaha* (1920), *Bamuner Meye* (1920), *Narir Mulya* (an essay) (1923), *Dena-Paona* (1923), *Nava-vidhan* (1924), *Harilakshmi* (containing three stories) (1926), *Pather Dabi* (1926), *Srikanta* Part III (1927), *Shorashi* (dramatized version of *Dena-Paona*) (1927), *Rama* (dramatized version of *Palli-Samaj*) (1928), *Taruner Bidroha* (an essay) (1929), *Shesh Prasna* (1931), *Swadesh-o-Sahitya* (a collection of essays and addresses) (1932), *Srikanta* Part IV (1933), *Anuradha-Sati-O-Paresh* (1934), *Biraj-bou* (dramatized version) (1934), *Bijoya* (dramatized version) (1934), *Bipradas* (1935), *Chelebelar galpa* (1938), *Subhada* (1938), *Shesher Parichaya* (The first fifteen Chapters are by Saratchandra who left it unfinished. The concluding portion is by Radharani Debi) (1939). Collected Works, in 7 volumes (Basumati, 1919-35), *Saratchandra-o-Chhatrasamaj* (1938), *Saratchandrer Patrabali* (1948), *Sarat Sahitya Sambhar*, in 13 volumes (Collected works) (1951-1964).

Select Bibliography: *Bengali:* Srikumar Banerjee—*Bangasahitye Upanyasher Dhara;* Brajendranath Banerjee—*Sarat-Parichaya;* Subodh Chandra Sengupta—*Saratchandra.*

English: Humayun Kabir—Saratchandra Chatterji; S. C. Sengupta—Saratchandra: Man and Artist. (The details of Saratchandra's life given above and the dates of publication of his works are generally taken from Brajendranath Banerjee's book).

SRI AUROBINDO
(1872-1950)

BY

SISIRKUMAR GHOSH

One of the most remarkable of the Indian Renaissance men, Sri Aurobindo had become a legend in his own lifetime. Not many know the reality, either inner or outer. The outer course is easier to relate, the inner a somewhat different matter. He had once said, "Nobody except myself can write my life, for it has not been on the surface for man to see." But even the little that one *can* see, and perhaps imagine the rest, was enough to make an eminent Frenchman describe him as the greatest synthesis between the genius of the East and the genius of the West.

His life falls into four broad divisions, each symbolised by a different place or locale: England, Baroda, Calcutta and Pondicherry.

Aurobindo, third child of his parents, was born in Calcutta on August 15, 1872. His father, Dr. K. D. Ghose, an I.M.S. officer, like educated Indians those days, was slightly westernised. He sent the children first to a missionary school in Darjeeling and then, when Aurobindo was about seven, to England. For long or short periods the boy and man lived away from home. Intellectually gifted, if not a bookworm, Aurobindo won a scholarship from St. Paul's School, London, to King's College, Cambridge, where he did very well in Classical Tripos. He also competed successfully for the Indian Civil Service but was later disqualified for absenting himself from the riding test. His father was deeply disappointed at "Auro's" not being an I.C.S. But now that he was not going to be a Civilian what was he to do ? The Gaekwad of Baroda, a great judge of men, happened to be in London, and offered him a job in his progressive state in western India. In 1893 Aurobindo returned to India. To Bengal he would come later, that is come over. In the meantime there would be brief visits from time to time.

A chapter was over, a chapter begun. Aurobindo stayed at Baroda for over a decade. At first he worked in the administrative departments but later and longer as a Professor of English and French, at the college. Apart from some poetry (little known) and an arranged marriage (the letters of his wife are revealing), the Baroda period stands out for two reasons: it was here that "Mr. Ghose" (as he was called those days) oriented himself in the Indian lore, recovered the grassroots; also his later politics, not altogether non-violent, had its beginnings here. At first this expressed itself through writings. His forthright, if anonymous, criticism of the then Congress policy in a series of essays, "New Lamps for Old", drew attention. Considered subversive for the prevailing Moderate taste, the series

had to be dropped. The young scholar was, however, marking time, keeping a close watch over the turn of events. And when during the Swadeshi days nationalist resistance to the British Raj took a tempestuous turn Aurobindo suddenly gave up the Baroda professorship and came over, at an exiguous salary, apparently to work as the Principal of the newly-founded National College at Jadavpur, Calcutta. But his real work lay perhaps elsewhere: as journalist and the "brain" behind the so-called secret society and the terrorist movement. His brilliantly written editorials in the *Bande Mataram* were a source of annoyance to the government which smelt sedition but were unable to prove it. All the while the paper was eagerly sought after by delighted readers and was an influence in the making of a nation. His flaming patriotism and selfless character easily made him the hero of the younger generation. Yet, all through, his spiritual *sadhana*, which too had started at Baroda, went apace, necessarily away from the public gaze.

He was no doubt involved in politics, of the extreme sort. But it was not merely politics, but part of a wider national movement, which, in turn, depended upon openly recognised spiritual factors. Let a few examples, chosen more or less at random, show. "The question has once more been brought before the public whether a politically dead people can retain their spirituality. Some so-called expounders of Hindu philosophy and religious thought seem to have a positive aversion to politics and disguise their total lack of spiritual culture by a vague denunciation of politics as an expression of the material life. One who is of opinion that Hindu philosophy has enjoined such maudlin hatred for matter must have studied it very badly. ... Those Hindus who giving ungrudging audience to this unnational and unspiritual preaching of the denunciation of courageous resistance when there is occasion for it, are merely condemning themselves to the patient endurance of lifelong humiliation. Faith in the potential strength of our people is the basis of our national movement and to realize that strength and energize it by taking every opportunity for unflinchingly courageous action, is the only way in which the national movement can be pushed forward to the rapid and triumphant consummation which Asia needs and India demands" (10-11-1907). But even then he never lost sight of the ultimate ideal: "The movement of which the first outbreak was political, will end in spiritual consummation" (29-3-1908).

But the British government, deeply suspicious, did not relax its vigilance. Hard put to find any definite evidence they were not above fabricating facts or forcing interpretations. Soon they had their chance. A wave of terrorism swept over the country, and Bengal seemed to be its epicentre. When bombs burst at Muzaffarpur, in North Bihar, the dragnet was thrown wide and along with fellow-travellers Aurobindo was arrested. The yearlong detention (1908-09)

marked another shift in his way of life and thinking. The government's vain attempt to prove his complicity with organized acts of violence did not convince either the judge, a Cambridge contemporary, or the jury. On May 9, 1909, Aurobindo was let off. The trial was highlighted by an extraordinary peroration by his counsel, Chittaranjan Das, a rising Calcutta barrister. In closing his argument the counsel said: "Long after this controversy is hushed in silence, long after this turmoil, this agitation ceases, long after he is dead and gone, he will be looked upon as the poet of patriotism, as the prophet of nationalism and the lover of humanity. Long after he is dead and gone his words will be echoed and re-echoed, not only in India but across distant seas and lands. Therefore, I say that the man in his position is not only standing before the bar of this court, but before the High Court of History."

After his release Aurobindo again took up the political work. He also started two new weeklies, in English and Bengali, *The Karmayogin* and *Dharma*. But the tone was now different. Something had happened. His Uttarpara speech, delivered shortly after his release, hinted at the change of attitude, in emphasis. In course of that speech he had hinted at his real mission, the work that would absorb his energies more and more. "I spoke once before that this movement," he said, "is not a political movement and that nationalism is not politics but religion, a creed, a faith. I say it again today, but I put it in another way. I say no longer that nationalism is a creed, a religion, a faith; I say that it is the Sanatana Dharma which for us is nationalism."

The link with politics was snapping, other horizons were opening up before him. Gradually he came to feel that the political destiny of the nation would reach its end without his active participation, and that the nation was not ready for his real programme. For himself, he had received an *Adesh*, or inner call, for a deeper *sadhana* or plunge into the mysteries of the Self. His would be the more arduous but no less necessary task of carrying on the spiritual evolution of mankind which had its beginning in the Vedic period and now called for a larger synthesis true to the time-spirit, a reconciliation of science and spirituality, of the East and the West. Farewell politics !

In February 1910 Sri Aurobindo, "wanted" by the police, went underground in nearby Chandernagore. A little later he sailed to Pondicherry, then a French settlement, where he stayed for good. The government, still apprehensive, had him closely watched and even attempted to kidnap him. Another case was brought against him, in vain. The people thought that he would eventually return to India and to politics. But he had been granted a different vision, another work. And even the Congress leaders failed to persuade him to come back. I am in search of a higher goal, he wrote to Chittaranjan Das

in self-explanation. When I reach that goal I will begin my work with my base there.

What was this goal, ideal or work ? Perhaps to explain that he began editing, along with Paul and Mira Richard ('Mother'), in 1914, a philosophical monthly, *Arya*. Most of his important works, *On the Veda, Essays on the Gita, Isha Upanishad, The Human Cycle, The Ideal of Human Unity, The Synthesis of Yoga* and *The Life Divine* (which many consider "the greatest work of the century") have appeared serially in that little magazine. The world can show few parallels to such creativity. What was the secret ? The *Arya* embodies, he has himself told us, "much of the inner knowledge that had come to him in the practice of yoga." Recording and ordering such knowledge was not an easy task. It amounted, in effect, to writing a kind of Veda of the New Age. What was the idea ? "The idea was the thinking out of a synthetic philosophy which might be a contribution to the new age that is coming upon us. We start from the idea that humanity is moving to a great change of its life which will even lead to a new life of the race,—in all countries where men think, there is now in various forms that idea and hope,—and our aim has been to search for the spiritual, religious and other truth which can enlighten and guide the race in this movement and endeavour. The spiritual experience and the general truths on which such an attempt can be based, were already present to us, otherwise we should have had no right to make the endeavour at all; but the complete intellectual statement of them and their results and issues had to be found. This meant a continuous thinking, a high and subtle and difficult thinking on several lines, and this strain, which we had to impose on ourselves, we are obliged to impose also on our readers." The *Arya*, with its limited circulation, closed publication in 1921. The serials, slightly revised, have been later issued in book form. At first he lived with a few friends or followers. Gradually the numbers grew and with it an Ashram. This has been primarily the work of the Mother who, after a brief early visit, has finally stayed on from 1920. In 1943 an International Centre of Education was opened, in keeping with Sri Aurobindo's and the Mother's educational ideas. In the light of his maturer works Sri Aurobindo is nothing if not a teacher, a world teacher—of integral living. 'Integral' is the word. He has himself used it. The Aurobindean world view or yoga does not dismiss Matter and creation as a folly or an illusion. It is a realistic Advaita that he proposes. In the words of an earlier poem, "Ahana":

> Two are the ends of existence, two are the dreams of the Mother;
> Heaven unchanging, earth with her heart-beats yearn to each other,
> Earth-souls needing the touch of Heaven's peace to recapture,
> Heaven needing earth's passion to quiver its peace to rapture.

This reconciliation has been his one enlarging theme. In *The Life*

Divine he has attempted to show that "the affirmation of a divine life upon earth and an immortal sense in mortal existence can have no base unless we recognise not only eternal Spirit as the inhabitant of this bodily mansion, the wearer of this mutable robe, but accept Matter of which it is made as a fit and noble material out of which He weaves constantly His garbs, builds recurrently the unending series of His mansions." Elsewhere we hear him speak: "If it be true that Spirit is involved in Matter and apparent Nature is secret God, then the manifestation of the divine in himself and the realisation of God within and without are the highest and most legitimate aim possible to man upon earth." As such it may be described as a metaphysics of hope, affirmation and reconciliation, one of the grandest ever proposed in any time or civilization.

The metaphysics draws heavily upon the fact of human evolution and the inner discipline of yoga, to both of which he has added a perfectionist and ontological, or futuristic, note. To such a view what does the future look like? In his own words: "As there has been established on earth a mental Consciousness and Power which shapes a race of mental beings and takes up into itself all of earthly nature that is ready for a change, so now there will be established on earth a gnostic Consciousness and Power which will shape a race of gnostic spiritual beings and take up into itself all of earth nature that is ready for this transformation." This transformation, individual no less than collective, is the alpha and omega of the Aurobindean vision. "Yoga must now be revealed to mankind because without it mankind cannot take the next step in the human evolution."

This concern with yoga or the future of the race does not mean that he had lost all interest in the country or in world affairs. During the Second World War he declared his support for the Allied cause. Later, at the price of being misunderstood, he advised the Indian leaders (who turned a deaf ear to the proposal) to accept the Cripps offer, and avoid the tragedy of division. Later, when India became free, on what happened to be his birthday, he did not accept the division of the country as final or desirable. His message on the occasion set forth five dreams, profoundly purposeful and prophetic. The first of these dreams was a revolutionary movement for a free and united India. India is free but she has not achieved unity. By whatever means the division, he held, must go. The second dream was the resurgence and liberation of the peoples of Asia. The third was a world-union forming the outer basis of a fairer and nobler life for all peoples of the world. But an outward basis could not, by itself, be enough and, he believed, a new spirit of oneness would take hold of the human race. Fourthly, he had faith in the spiritual gift of India, which had, in a way, already begun. The fifth and final dream was of a step in evolution which would raise man to a higher and larger consciousness and begin the solution of the problems that have vexed and perplexed

him since he first began to think and dream of individual perfection and of a perfect society.

Across the years the nationalist had turned an internationalist, the idealist become a yogi and seer. The range of his mature vision comes out clearly and simply in his 1949 message to the United States of America: "It has been customary to dwell on the division and difference between these two sections of the human family (the eastern and the western) and even oppose them to each other; but for myself I would rather be disposed to dwell on oneness and unity than on division and difference. ...There is a common hope, a common destiny, both spiritual and material, for which both are needed as co-workers. ...East and West could be reconciled in the pursuit of the highest and largest ideal, Spirit embrace Matter and Matter find its own reality in all things in the Spirit." Or, as he put it in *Savitri*, his poetic testament and inner epic, "And Matter become the Spirit's willing bride."

On December 5, 1950, Sri Aurobindo, first and last a great reconciler and visionary, passed away. Or, it would be proper to say, as the Mother has emphasized, he gave up the body. In his own words:

> Tied to the stake of a perennial Fire
> He burns on an unseen original verge
> That matter may be turned to spirit stuff
> He is the victim of his own sacrifice.

HAJI MUHAMMAD MOHSIN
(1730-1812)

BY

RAMESH CHANDRA MAJUMDAR

Agha Fazlullah, a Persian merchant, came to India for purpose of trade in the 18th century. He first resided at Murshidabad and then settled in Hooghly. His son, Haji Faizullah, married a rich widow and the issue of this marriage was Haji Muhammad Mohsin. The widow had a daughter by her first marriage named Mannu Jan Khanum who was then eight years old and had inherited great wealth.

Haji Muhammad received general education in Arabic and Persian and studied Quran and the Classics in which he was very proficient. The most interesting thing about him is that at the age of 32, he went out on a world tour and travelled in Hindustan, Arabia, Persia and Central Asia for a period of 27 years. During his absence his step-sister had married a rich man, but became a widow within a few years, inheriting large estates from her husband. She was very fond of her step-brother Mohsin, and when she died in A.D. 1803 she bequeathed

to him the whole of her estates. By that time Mohsin was about 73 years old, and being unmarried and of a religious temperament, he decided to spend the vast wealth which he had thus inherited on religious ceremonies and charities. With this object in view he disposed of his property by executing in 1806 a *Tauliatnama*, thereby creating an endowment fund. A copy of this trust-deed still remains and a summary of it is reproduced at the end of the article. Briefly speaking, he appointed two Managers to carry on the terms of the deed and practically left everything to their discretion subject to the following general provisions:

The whole of his assets should be divided into nine portions, two of which were to be received by the Managers for their personal expenses. Of the remaining seven shares, three should be devoted to the expenses of celebrating the religious rites and festivals customary in his family and repair of the Imambara and the family burial ground, the balance being spent in salaries and pensions of the staff engaged as Officers and servants of the Imambara. It is worthy of note that not a word is said in this trust deed about spending any part of this huge wealth for education of the Muslims. As a matter of fact, he merely followed the orthodox traditional practice of applying his wealth for religious purposes.

The Managers appointed by Mohsin proved unfaithful and squandered the money for their own benefit. They were also guilty of many other offences, so much so that at last the Government interfered for the better management of the endowment under regulation XIX of 1810. It is under the Government direction that the major part of the assets was spent for granting facilities to Muslim students for receiving education at a cheaper rate. In other words, a large part of the normal fee was paid out of the Mohsin fund and only a small part was to be borne by the student. In addition provision was made for scholarships, hostels and appointment of Persian teachers in schools and colleges. Of course, the Government also looked after the Imambara and renovated it at great expenses so that the building today is a magnificent one and has elicited the praise of many as a fine piece of architecture.

Haji Muhammad Mohsin died at the age of 82 in 1812. It would be evident from what has been said above that though there is a general opinion that Haji Muhammad Mohsin earned enormous wealth by his own effort and utilized it for promoting education, none of these two assumptions is true. He is not entitled to any credit either for the acquisition of the wealth which he inherited from his step-sister, nor did he earmark any amount for the purpose of education. The enormous wealth which he had left was diverted to the promotion of educating Muslim boys only after the Government had taken over the management of the fund. Nevertheless, Haji Muhammad Mohsin should ever be remembered not only for his saintly life but

also for the fact that he was an indirect agent for the promotion of education amongst Muslims on a large scale.

SUMMARY OF THE TRUST DEED OF HAJI MUHAMMAD MOHSIN

"In 1806 he (Haji Muhammad Mohsin) executed a *tauliatnama*, or deed of appropriation of his property, in which it was stated that in the testator's family, from generation to generation, certain charges had been incurred and usages observed in connection with the celebration of religious rites and festivals, and that, as he had no children by whom the performance of these pious duties could be performed, he desired to make provision for their continued discharge. He, therefore, made over specified property to two managers, with instructions that they should divide the net income into nine equal shares, two of which they should keep for their own use, three they should devote to the expenses of celebrating festivals and executing repairs in the Hooghly Imambara and burial-ground, while the remaining four shares should be spent in paying salaries and pensions, according to a list attached. The bequest included the following properties: the zamindari of *pargana* Kismat Saiyadpur and Sobnali in Khulna and Jessore, the Imambara building, the Imambara bazar and *hat*, and the furniture of the Imambara at Hooghly.

"It appears from the proceedings of the Vice-President in Council, Persian Department, dated the 8th December 1826, and from the correspondence generally, that these salaries and pensions were payable to the officers and servants of the Imambara, so that the whole endowment, as far as its purpose was specified, was for the support of that religious institution, of the ceremonies performed in it, and of the persons employed in it. The founder added the provision that 'the managers after me will exercise their discretion and authority either to continue or discontinue them (the allowances and pensions) as they may think proper, and I have made over the management generally to them.' No specific direction, however, was given as to what use should be made of any savings which might accrue from the discontinuance of salaries or pensions under the power given by this last clause, the matter being thus left to the discretion of the managers. . . .

"Haji Muhammad Mohsin died in 1812, and the managers whom he had appointed seem immediately to have entered upon a course of mismanagement and embezzlement. According to the finding of the Court of Sadar Diwani Adalat, the proper objects of the endowment were neglected, the Government revenue fell into arrears, while the income was spent on quarrels between the managers, bribes to the police and *amins*, and gifts to the managers' relatives. Moreover, in order to increase their own profits at the expense of the trust, they forged a perpetual lease in their own favour and that of their relatives, purporting to have been executed by Haji Muhammad Mohsin before the deed of foundation. The Board of Revenue interfered for the better

government of the endowment under Regulation XIX of 1810, at first associating a Superintendent with the managers, then laying down rules for their control, and finally, in 1817, as these milder measures had only made matters worse, dismissing the managers altogether. As the relatives of the latter were implicated with them in the frauds committed, a Government servant was appointed to administer the endowment under the orders of the Board and Local Agents. From this time the institution has been practically controlled by Government."[1]

[1] L. S. S. O'Malley and Monmohan Chakravarti—Bengal District Gazetteers: Hooghly. Calcutta, 1912. pp. 292-3.

ASUTOSH MOOKERJEE
(1864-1924)

BY

NARENDRA KRISHNA SINHA

Asutosh Mookerjee was born on 29th June 1864 in Calcutta. His ancestral home was in the village Jirat in the Hooghly district. His father Gangaprasad Mookerjee, an M.B. of the University of Calcutta, became a medical practitioner in Bhowanipore, Calcutta and built his house there. Asutosh Mookerjee had his early lessons in Bhowanipore Chakraberia School. In 1876 he became a student of South Suburban School where Pandit Sivnath Sastri was the head-master. From this school he passed the Entrance examination of the University of Calcutta. He was second in the list in order of merit. He studied in the Presidency College from 1880 to 1885. He was first in the first class in the B.A. and M.A. examinations in mathematics. While he was still a College student his research papers were published in the *Cambridge Messenger of Mathematics*. In the words of Sir Gurudas Banerjee this was "a fair earnest of a promising future." He got the Premchand Roychand studentship, the coveted blue ribbon of University career in Calcutta, in 1886. The same year he took his M.A. degree in another subject—physics. He was specializing in mathematics and physics but he was something more than a mere specialist. He became a Fellow of Royal Astronomical Society in 1885 and a member of the Asiatic Society in 1886. Thirteen mathematical papers by Asutosh Mookerjee were published in the Journal of Asiatic Society, Bengal, between 1886 and 1890.

Sir Alfred Croft, who was the Director of Public Instruction, offered him an appointment in the Presidency College. Asutosh Mookerjee wanted honourable terms of appointment, the status and pay of the European members of the Educational Service. The

Director of Public Instruction considered this to be an impossible demand. He could have been a great teacher. He could have established his school of mathematical physics. The idea continued to allure him. He regularly delivered lectures in the Indian Association for the Cultivation of Science, founded by Dr. Mahendra Lal Sarkar, from 1887 to 1891. The ambition of his life was to be a research professor in the University of Calcutta. Gurudas Banerjee who was Vice-Chancellor of the University (1890-92) could not collect sufficient funds to create a chair for him which would have yielded a modest income of Rs. 4,000—a year. The result was that Asutosh Mookerjee drifted into law. He passed his B.L. examination in 1888. He served his articles under Rashbehari Ghose and began his practice in the High Court in August 1888. He became a puisne judge of the High Court in June 1904.

Asutosh Mookerjee became a Fellow of the University of Calcutta in January 1889, a member of the Syndicate in March the same year. He became a member of the Society de Physique of France, of the Mathematical Society of Palermo in 1890, a member of the Royal Irish Academy in 1893. His book *Geometry of Conics* was published in 1893. He became a Doctor of Law in 1894. Tagore Law Professor in 1898. In 1899 he became a member of the Bengal Legislative Council as a representative of the University of Calcutta. In the Council he became conspicuous for his opposition to the notorious Mackenzie Bill. It was only less vehement than that of Surendra Nath Banerjee. This Act officialized the Corporation of Calcutta. He was, however, nominated one of the Commissioner of the Corporation. He became a respresentative of the Corporation on the Bengal Legislative Council for some time. His speeches in the Legislative Council on the Bengal Financial Estimates from 1900 to 1904 were mainly on three heads—Education, Law and Justice. He was elected to the Imperial Legislative Council early in 1904. There his short tenure was marked by very effective speeches on the Indian Universities Bill, Official Secrets Bill and the Financial Statement. He shared with G. K. Gokhale the burden of the hard fight against the Universities Bill.

He served as a distinguished judge of the High Court of Calcutta from 1904 to 1924. An enormous mass of authoritative judicial decisions emanated from him. His judgments had only to be quoted to command universal respect. They were masterful expositions of law on every subject with which they dealt. His stand against executive high-handedness deserves to be particularly noted. He was in the fullest sense a learned judge.

Asutosh Mookerjee was appointed Vice-Chancellor of the University of Calcutta on 31 March, 1906 for two years. He was reappointed three times. In those days this was the most important honorary office in the gift of the Viceroy. His first important achievement as

Vice-Chancellor was the framing of the University regulations "to move its obvious defects in organisation and working and in certain no doubt essential points to extend its aims and functions." The Government of India accepted the regulations without any alteration. He also achieved a great political triumph in the first year of his Vice-Chancellorship. Bamfylde Fuller, Lieutenant Governor of Eastern Bengal and Assam was ruling with a high hand in the newly created province. His education department wanted to disaffiliate two schools for their connection with anti-partition agitation. Asutosh Mookerjee wrote to the Government of India requesting that the university might be permitted to deal with the affair as it thought proper. The Government of India agreed. Fuller resigned. He said that it was "a concession to those people in Calcutta who have been striving to render my government impossible."

Asutosh Mookerjee introduced with the concurrence of the Senate changes of a fundamental character in the curriculum. The aim was to simplify examinations. Beyond Matriculation thoroughness was demanded and a wide choice of subjects was given. The doctorate degree was introduced in all faculties for the recognition and promotion of original research. He introduced in inalienable basic principle of a university, a combination of research and teaching. The plan was also evolved of university M.A. classes. A Committee was formed by the Government of India under the Chairmanship of Asutosh Mookerjee. The Committee recommended in 1916 that the central control of higher teaching in arts and science should be placed entirely under the University and the University should be placed in entire charge of M.A. teaching. This concentration of post-graduate teaching in arts and science may be regarded as one of the greatest achievements of his life. New Professorships were created as a pledge and promise of future development. The conception of research thus came to stay.

The University had not received endowments for forty years. The Vice-Chancellor's capacity and devotion inspired confidence after a period of prolonged distrust. The princely benefactions of Taraknath Palit and Rashbehari Ghosh totalling about Rs. 48 lakhs (present value) enabled him to lay the foundations of the University College of Science. Higher science teaching and research thus began in Calcutta. He succeeded in making it not a provincial but an all-India college of science. The Government of India was not prepared to supplement those princely benefactions by a grant on a generous scale. But enthusiasm was aroused. Meghnad Saha, Satyendra Nath Bose, Sisir Kumar Mitra, Girindra Sekhar Bose and others served as young pioneers of research. Praphulla Chandra Roy, C. V. Raman, Brojendra Nath Seal, Ganesh Prasad, Dinesh Chandra Sen, C. E. Cullis, Sarvapalli Radhakrishnan formed a galaxy of professorial talent. Asutosh Mookerjee thus re-defined Indian higher

education. He changed the climate of higher studies. The Government of India appointed a Commission under Sir Michael Sadler. Asutosh Mookerjee was a member of this Commission. It is not possible for us to assess the personal contribution of Asutosh Mookerjee to this very valuable report which has been described as a monument of academic wisdom. It expressed its appreciation of the changes introduced by Asutosh Mookerjee.

In the University of Calcutta Asutosh Mookerjee opened up new vistas and expanding horizons. Comparative philology, anthropology, experimental psychology and Pali were included in the list of subjects for teaching and research. The department of Indian languages was opened in 1917. The introduction of M.A. degree in the vernacular literatures of India marked a new departure.

Asutosh Mookerjee was Vice-Chancellor again from 1921 to 1923. The distinguished Indian Vice-Chancellors who were at the helm of affairs during the years 1914-1921, walked in the footsteps of Asutosh Mookerjee and his ascendancy in University affairs was never shaken. In the last two years of his Vice-Chancellorship, 1921 to 1923, the relations of the University with the Government of Bengal were very tense. Presiding over a meeting of the Senate he openly declared. "we shall never be a part of the Secretariat."

Asutosh Mookerjee retired from the High Court on 31 December, 1923. A letter which was written by Lord Lytton to Asutosh Mookerjee offering him another term as Vice-Chancellor on certain conditions was outrageously insulting. He declined the humiliating offer in a letter which thrilled India. But he was now convinced that he must pursue a new line of action. Even before his retirement from the High Court he was thinking of a joint measure of opposition along with Deshbandhu Chittaranjan Das. But he died suddenly on 25 May, 1924 at Patna where he had gone to argue as an advocate in a celebrated case.

BHUDEB MUKHOPADHYAY
(1827-1894)

BY

BIMALA PROSAD MUKERJI

It is not quite easy to place Bhudeb Mukhopadhyay in the history of the so-called Bengal Renaissance. To those casually acquainted with his views he appears to be 'a Hindu of Hindus' a revivalist. But those who have read him deeper and known better the social content of his writings would have to admit that he was not just a traditionalist. He was a man of really broad sympathies and entertained quite

radical views on social and national integration. His views on truly popular education were not only basically sound, they deserve close attention and respect even today. That Bhudeb could represent in his own way in his own time that synthesis of the best thought of the East and the West inaugurated by Raja Rammohan Roy was due to the fact that he was the happy beneficiary of the two types of education.

A native of Hooghly district, Bhudeb was born at 37, Haritaki Bagan Lane, Calcutta on 22 February 1827, as the entry in his Diary (1st January 1880) indicates. His father, Viswanath Tarkabhusan, a renowned Sanskrit scholar, put the young boy at the age of nine first into Sanskrit College where he was kept for a couple of years. But seeing better prospect in English education, he took him over to the Indian Academy and two other schools before finally getting him admitted in the 7th class of the Junior Department of the Hindoo College in 1839. There Michael Madhu Sudan Dutt, the great poet of Bengal, was his class-mate. Theirs was a genuine friendship in spite of the parting of ways and long breaks. In 1841, Bhudeb won a Junior Scholarship and was promoted straight from the 5th to the 2nd class of the Senior Department. In 1842, he sat for the Senior Scholarship examination and won the Burdwan Scholarship of Rs. 40 per month. He remained a Senior Scholarship-holder for two years, 1843-45, and studied in the Hindoo College for a total period of six years and five months. His academic record was of sustained brilliance and he was granted a certificate of 'creditable proficiency in the English Language and Literature and in the Elements of General Knowledge' (General Report of Public Instruction for 1842-43). While at college, he got the second place and a silver medal for his competitive essay on Women's Education, the first place and the gold medal going to Michael M. S. Dutt.

Leaving college, he became Head Master of the Hindu Charitable Institution founded chiefly through the efforts of Raja Radha Kanto Deb and Devendranath Tagore and ironically described by *Friend of India* as 'set on foot with a view to emptying missionary seminaries' (5 March 1846). But as he differed with the authorities on certain matters, he resigned and decided to start a school of his own which he did at Chandernagore in 1847. Financial difficulties at home, however, forced him to leave Chandernagore Seminary, his own handiwork, in search of a better prospect. Bhudeb entered Government service as Second Master in the English Department of the Calcutta Madrassah on 20 December 1848. His subsequent career was one long record of distinguished service. His hard work and honesty earned him quick promotions from Head Mastership of Howrah School (18 October 1849) and Hooghly Normal School (22 June 1856) to the position of Offg. Asst. Inspector of Schools (15 July 1862). Eventually he rose to Class I (Temporary) of the

Bengal Educational Service in 1877 as Inspector of Schools, Western Circle, also in charge of the Bihar Circle. The same year he was honoured with the C.I.E. On 25 January 1882, he was nominated a member of the Lt.-Governor's Council and in February, appointed a member of the Educational Commission set up by the Government of India under the chairmanship of Sir William Hunter. Bhudeb's long administrative experience had made him not only an expert in the matter of drafting reports but given him the skill and competence to evaluate and speak with authority. It is a fact that the Report submitted by the Bengal Committee to the central body of the Commission was Bhudeb's work and the Chairman complimented him on what he understood to be a 'first rate piece of writing' finished with care in the midst of his official preoccupations.

Bhudeb was indeed an efficient organizer. His establishment of the Chandernagore Seminary and Sripur School with local help and his organization of Normal Schools in Bengal for turning out better teachers reveal how earnest were his efforts to promote popular education. He was convinced that knowledge to be meaningful must be spread in the vernacular. Hence the two journals that he edited came out in Bengali from Hooghly. The first, 'Siksha Darpan O Sambad-Sar', was a monthly started by himself in May 1864 which in its first issue explained his object of conveying to rural people useful knowledge of the laws of the land and significant gists of news and reports published in Calcutta journals. That would be education in extended sense, a real boon to ignorant villagers wasting time and energy in small talk, rivalry and intrigue. Most of the articles, notes and comments came from his pen. The other journal was 'Education Gazette O Saptahik Vartabaha', first started on 4 July 1856, of which Bhudeb became editor in 1868 after the resignation of Pyari Churn Sircar. The post was offered to him at the request of the Lt.-Governor of Bengal conveyed through the Director of Public Instruction and accepted on condition that the editor would have complete rights over the paper and that the salary paid to him would be converted to a grant-in-aid with no interference except with the consent of the Government of India. The first issue on 4 December 1868 stated clearly the aims and ideals of the journal, of publishing truthful reports without fear or favour. This would be a much-needed corrective by way of clarifying government policies particularly to people in the countryside and also of checking possibly wrong decisions or indiscretions of government officers. Until Bhudeb's death in 1894, the Education Gazette continued to be a live wire and though primarily an educational journal, it served as a newspaper, a monthly, and a quarterly publication, all in one. To its credit stands the bringing out of many important reports as well as of creative literature produced by such notable writers as Hem Chandra Bandyopadhyay, Dinabandhu Mitra, Raj Krishna Mukhopadhyay, Nabin

Chandra Sen and others. Besides, practically all the important contributions of Bhudeb—his essays in social criticism (*Paribarik Prabandha*, *Samajik Prabandha*, *Achara Prabandha*, *Vividha Prabandha* Parts I and II), *Banglar Itihas* (End of Part III), and *Swapnalabdha Bharatvarser Itihas* were first published in this paper.

As an educationist, Bhudeb did not rest with merely propounding the supreme object and necessity of education which he knew as much as any academic theorist. His firsthand knowledge and experience of the current system and methods of teaching, his long chore of inspecting and reporting gave him an objective outlook, a quick eye at diagnosing the sad effects of imparting unreal instruction. He favoured the use of the mother tongue and insisted on the serious cultivation of Bengali as a language in addition to Sanskrit which would remain the parent stock of Indian languages. Himself a classicist, he wanted Bengali to be enriched as an independent medium of expression, not as a derivative or as an occasional exercise in translation from Sanskrit or English. Principal Tawney's taunt: 'Bhudeb with his C.I.E. and fifteen hundred a month is still anti-British' was unjustified. For nobody was more conscious of the need for higher education and at the same time of the mischief it caused to knowledge of the vernacular. He was well aware of the evils predicted by Sir John Wood. Yet he was bitter against the Government's policy, advocated by Campbell, of abolishing the schools and colleges founded earlier,—those catering to higher education for the people, of lowering their status and reducing the number of scholarships to deserving students. Dr. N. K. Sinha in his biographical study of Asutosh Mookerjee quotes in this context certain remarks of Bhudeb, certainly the greatest authority of his time on primary education: "Religious sanction growing weak, village communities nearly gone, manufacturing industry come to the verge of ruin, heaviest incidence of taxation falling upon land, a foreign language becoming the languages of court and commerce, the natural incentives to popular education have been weakened. Talk of educating the masses and leaving them where they are betrays an ignorance of the simplest principles of sustained human action. Government organized on the *laissez faire* principle comes little into touch with the mass of the people." Yet Bhudeb could not accept the Government's policy and argument for curtailment. So he added: "To sacrifice higher education in the supposed interest of the lower classes is simply to overthrow the foundation on which alone the whole system can possibly rest. A channel has been created through which ideas can be admitted and what we want is to distribute them widely." These words describe exactly how Bhudeb assessed the socio-economic set-up and how unwilling he was to compromise, regarding as he did higher education as transmitter and popularizer. Dr. Sinha very pertinently comments: 'The new depar-

ture in secondary and collegiate education with which the name of Asutosh Mookerjee is associated reacted upon the country as a whole precisely in this sense.' Fear of the educated Bengalees, growing too sensitive and critical, if not hostile to the British government in India, must have guided Campbell's policy of throwing the costly burden of English education on the aspirants themselves. Bhudeb, not for a moment admitting its fairness, took up the challenge and succeeded with the help of the local nobility in upgrading Boalia School to a first grade college in 1878, later known as Rajsahi College.

Bhudeb the educationist was also Bhudeb the patriot and nationalist. In the course of his Official work he had come to know the British mind and temper at its best and worst. Some administrators were decently understanding, others overbearing. But never did he submit to bullying or dictation. He held his head high and hardly ever went to see any European officer who kept an Indian visitor waiting outside if only to rub in his patronage and higher status. The Rev. James Long and the Rev. Alexander Duff were appreciative of Bhudeb's character. So was Mr. Pratt who sent from England on Bhudeb's death a fine tribute, calling him his 'first Indian friend. . .incapable of saying a word more than he felt, or of resorting to flattery or obsequiousness to his English visitor and official superior. Bhudeb had no sympathy for those countrymen of his who denounced everything Indian and wallowed in self-complacency by copying English speech and manners. This does not mean that Bhudeb was a reactionary. He was of course not a Derozian. He had noted the excesses of the Young Bengal phase, the sharp swing of the new radicalism and he was not enamoured of either. He would not accept what proved to be veneer. The contact with Europe was not to be taken at its face value but tested and assimilated in so far as it did not militate against native dignity and culture. That is why he preferred to stick to the Indian way of life, came not from a spirit of sheer old-fashionedness and obstinacy. Bhudeb had fierce honesty and a deep sense of self-respect equated to national prestige. It is thus that he set the example by his own conduct and expression and initiated in a way the 'Swadeshi Era'.

Bhudeb was a constructive critic, not an indiscriminate knocker. When he criticized the foreign ruling authority or his own society, it was with cogent reason backed by practical suggestions of remedy or improvement. He had a deep love of history and was well-read in philosophy and literature. In nationalist spirit, educational effort and historical sense and social consciousness, Bhudeb had affinities with three great contemporaries—each a pioneer in his own field—Rajnarain Bose, Iswar Chandra Vidyasagar and Bankim Chandra Chatterjee, though he did not attain the same heights. But for all that, he showed the right way in many spheres of national activity, particularly concerning Indian unity and a national lingua franca.

He saw clearly the fundamental defects of our social outlook such as parochialism and sectarianism which impeded the progress of social cohesion and national solidarity. The reasons why the European peoples were better organized and united, Bhudeb wrote in Siksha-Darpan, were two-fold: community of feeling and speech and common national heritage. No nation can prosper without the strength of a stored-up tradition behind it. This tradition should be preserved with dignity and confidence; this strength should not be bartered away for the weak glamour of externals borrowed from aliens. The Greeks and the Romans did not give up their national ways. The Britishers stick to their way of life and would not be denationalized. If they are a great power today, it is not because of their superior intelligence or learning or piety. They are 'whole' men, not hollow men. They are self-reliant and self-confident. It is nothing wrong if we learn from them and profit thereby. But to try to be an Englishman is blatant idiocy, a most derogatory piece of exhibitionism. We Indians have a rich tradition, we too have a great heritage. It is the land, its earth and water that have nourished us. There can be no harm or danger if the climate is kept pure and healthy. If the mother is not sick, the child will not ail but thrive on her milk alone. In another place Bhudeb wrote: Difference of language is the characteristic mark of difference of nationality. Those who use the same mother-tongue, a form of speech that comes automatically and is mutually understood, belong to one nation. This sense of one nationality breeds courage, confidence and independence and all these can be had through care and concern for one's own language.

To Bhudeb patriotism or national feeling was a practical thing, not a luxury of sentiment. National conduct is the criterion of national greatness. To achieve that, one has to have purpose and determination, in a word, effort to improve through knowledge which is power. Knowledge is increased by the study of history and the social sciences, power is improved by the cultivation of science and technology, not in the theoretical way as taught in Indian colleges but in the applied sense of experiments. This is why Bhudeb thought it necessary to write such useful books as *Purabritta-Sar* (1858), *Englander Itihas* (1862), *Banglar Itihas* (Part III—in continuation of Part I written by Ramgati Nyayaratna and Part II by Iswar Chandra Vidyasagar), *Kshetra-tattva* (1862) and *Prakritik Vijnan* (Books One and Two, 1858 (?)-1859).

Bhudeb, a thorough Bengali and a Hindu, had neither a closed nor a communal mind. He considered himself an Indian first with firm faith in India's unity. In his official career he had the opportunity of mixing with various classes of people and noticing their customs and manners. Human material being the same, he was grieved to observe how it ran to seed, each provincial type or community being encupped in social exclusiveness by the formal barriers of caste, creed

and speech. It was these divisive factors breeding local particularism which continued to be the greatest hindrance to national unity. Mutual jealousy and provincialism created distrust, suspicion and hatred between Punjabis and Maharattis, Biharis, Oriyas and Bengalis while communal faction, as he wrote in the essay on 'Bharatvarser Musalman', drove a wedge between Hindus and Muslims, a very serviceable tool handed over to scheming British bureaucrats. The caste system, too, was often pushed to such lengths as put the longest premium on separation.

Here Bhudeb's sense of history stood him in good stead. Writing in *Banglar Itihas* (Part III, published ten years after his death), a book he unfortunately could not revise and bring up-to-date, he rightly observed that the Sikhs and Maharattas achieved political strength and unity because they did not permit caste to hinder their objective. Their great leaders came from the lower castes because to them the test of leadership was ability and power. At the same time, Bhudeb aptly pointed out, the two great powers came to grief because their vision was limited. They did not think in terms of Indian unity and had hardly any thoughts for the country as a whole or any real feeling for the people in other parts of India. Their patriotism was militant but not entirely identified. It was the Muslims who set the value on equality; it was the British who united India politically. Thus with regrets and fond hopes Bhudeb began an imaginary reconstruction of Indian history which he called '*Swapna-labdha Bharatvarser Itihas*' (1895). In this dream-sequence he projected his vision of ideal national unity. Thereafter the third battle of Panipat, the great Sivaji's descendant, Ramchandra is represented as receiving the Mughal crown from the willing hands of Emperor Shah Alam and Hindus and Muslim prospering together, proclaiming their brotherhood and dedicated to the service of their motherland. The two great communities whole-heartedly collaborate in civil government and military affairs. India is free and united happily. The English relinquish their possessions but stay on as traders. This is of course a pathetic instance of wishful thinking, showing Bhudeb's idealistic faculty. It also reveals how his mind reacted to such major issues as communal harmony and national unity.

Yet Bhudeb was no dreamer. He has left a mass of realistic thought and solid work. His educational enterprise was based on practical considerations. For instance, he wanted Hindi as the official language in Bihar and he succeeded in replacing the use of Persian by that of Hindi in courts of law. Besides, his contribution to the propagation of the vernacular in Bihar was most handsome. For he knew that in spite of the use of the vernacular being legalized, educated Indians were and would be still inclined to use English in the transaction of legal business which only served to give the advantage to English judges but none to poor litigants. To counteract all this Bhudeb tried

as Inspector of Schools in the Bihar Circle to introduce Hindi as a language in schools and had some really good books translated into the local vernacular from English and Bengali. This step, Bhudeb was convinced, would be not only beneficial to the young learners but in the long run conducive to the growth of a sense of belonging among the Biharis. Further, Hindi-Hindusthani was the language of the majority of Indian people, well-established under Muslim rule. Hence Hindi would be ultimately used as the common national language and that should be the strongest bond of union for all communities living in India. Bhudeb also felt strongly on regionalism the cure for which, he suggested and advocated, was inter-provincial marriage within respective castes. This would remove artificial barriers and make Indian society more compact and homogeneous. It is therefore clear that Bhudeb dared to think along new lines and in his secular concept of Indian unity, particularly in the social sphere, he was quite a radical if not a pioneer.

Bhudeb, the son of a poor Brahmin pundit, nourished on native culture and tradition, did not hesitate to accept the real enlightenment of the West which helped him organize himself. What he saw around him was the decadence of faith and ideal, cheap imitation of foreign manners and lack of an urge to improve. He criticized his own people as much for their anglicisms, living all the while in a society cluttered with formalities and restrictiveness, as he did the Government for their wasteful expenditure, their wish to impose and their indifference to the legitimate needs and aspirations of the people they ruled. A tireless worker for causes he believed in, Bhudeb retired from official life in July 1883 and went to Banaras where he stayed for about five years pursuing Vedantic studies. He came back to his home at Chinsura in 1888 and founded there a Sanskrit school, 'Viswanath Chatuspathi', named after his father. He also created the Viswanath Trust Fund of one lakh and sixty thousand rupees for running the school and maintaining two charitable dispensaries. With his death on 15 May, 1894 was ended a life lived nobly and very purposefully as a true Indian.

To understand Bhudeb Mukhopadhyay the man, his work and worth, one should go to the original sources—his writings, particularly his thought-provoking social essays and his most revealing Diaries, written in English and maintained regularly from 24 December, 1876, which ought to be printed and placed before the Indian public. These will show that Bhudeb had an integrated mind that wanted to tackle the inter-related problems of Indian social life, education and politics. He wrote civilized prose not with conscious effort, but with the desire to make his readers try to be self-critical and do some independent thinking. If his style lacked literary adornment, it is because he chose the language of reason. Bhudeb was a sincere believer in the principle of 'thorough' and in whatever he

undertook he gave of his best. Most significant was his role as a promoter of education, one that was rooted in the soil and related neither imitative nor mannerized. The problems incidental to popularizing education gave him an awareness of the social *milieu* and turned him into a practical social thinker, journalist, essayist and critic. Made of the sterner stuff, he did not tread the emotional path of nationalism. He talked instead of the country's real needs, of its multiple polyglot character, requiring a common language and a closer uninhibited social intercourse as the strongest adhesives. He indicated the directional trends of the Government's educational policy, the dangers involved in the theory of 'infiltration' and the creation of a social and intellectual distance which kills more truly than the caste does national integration and sense of dignity. Bhudeb made us startingly aware of our responsibility primarily as Indians, not provincials, and our duty to resist the superimposition of other values than our own, raising only false prestige on moral surrender.

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SRI RAMAKRISHNA
(1836-1886)

BY

SWAMI RANGANATHANANDA

Sri Ramakrishna is a unique spiritual teacher of the nineteenth century, who, in the words of Romain Rolland, "is the consummation of two thousand years of the spiritual life of three hundred million people." (*The Life of Ramakrishna*, p. 14). In the course of his brief life of fifty years, he experienced various dimensions of the spiritual life of humanity as crystallized in the world's religions, and powerfully influenced the modern renaissance in India initiated by Raja Rammohun Roy in the early decades of the nineteenth century.

Sri Ramakrishna's life falls into three broad phases: (1) birth, childhood, and early youth at Kamarpukur, his native village; (2) intense search for God and divine experiements in the field of religion

in the temple garden of Dakshineswar on the left bank of the Bhagirathi four miles to the north of Calcutta; and (3) sharing the fruits of his spiritual experiences with hungry spiritual seekers, young and old in Dakshineswar and Calcutta.

Sri Ramakrishna was born on February 17, 1836, corresponding to *Phalgun* 6, 1242 of the Bengali era, in the village of Kamarpukur, of Hooghly district, West Bengal. His parents, Khudiram Chattopadhyaya and Chandramani Devi, were richly endowed with moral and spiritual virtues; but their worldly wealth consisted of nothing more than a few huts and a third of an acre of cultivable land. The birth of Gadadhar, for that was the early name of Ramakrishna, was heralded by divine visions and ecstasies experienced by his saintly parents. They had five children, three boys and two girls; and Gadadhar was the fourth.

Sri Ramakrishna passed the first sixteen years of his life in the sylvan surroundings of his native village in intimate communion with man and nature. At the age of six, he had his first recorded spiritual experience when, while walking through the corn fields, he lost his external consciousness at the sight of a flock of milk-white cranes flying across the sky against the background of a thick mass of rain clouds. He continued to have such experiences off and on even during this early period; but he was to be a storm-tossed in them in the next phase of his spiritually eventful life.

Khudiram died when Ramakrishna was only seven years old and the burden of the family fell on the eldest brother, Ramkumar. Finding his sources of income in the village dwindling, Ramkumar moved to Calcutta in 1850. Soon he summoned Sri Ramakrishna also to join him. Sri Ramakrishna, now sixteen, reached Calcutta in 1852 and soon entered into the second phase of his life, which can well be described as stormy and eventful, all in the spiritual sense.

One day, Ramkumar, much concerned to see his brother living a care-free life and neglectful of his worldly prospects, gently chided him for not taking interest in education. To this Ramakrishna gave a characteristic reply: "Brother, what shall I do with a mere bread-winning education ? I would rather acquire that wisdom which will illumine my heart and getting which one is satisfied for ever." Ramkumar could not gauge the depth of conviction behind this utterance; but he knew the independent spirit of his brother and wisely left him to himself. Sri Ramakrishna thenceforth freely moved as his inner spirit moved him, and it soon moved him to an arena of life and struggle which was to be his path of destiny.

In 1855, Rani Rashmani, a pious, dynamic, and wealthy woman of Calcutta, built and endowed a magnificient temple in Dakshineswar dedicated to the Divine Mother of the universe in Her aspect as Kāli, and appointed Ramkumar as Her priest. The liberal spirit of the Rani had found expression in the addition of shrines dedicated to Kṛṣṇa

and Śiva also in the temple and in the provision of food and other amenities to visiting saints of all religions.

Within a year Ramkumar died, and Sri Ramakrishna assumed the priestly duties. It took no time for his inherent love of God, whom he now approached as the blissful Mother of the universe, to become transformed into a passion to *realize* Her and *commune* with Her. This passion elevated his humble offices of priesthood and image worship into the high instruments of spiritual fulfilment. Tears flowed continuously from his eyes. When the peal of evening bells in the temple announced the close of day, he would become sadder still and cry, "Another day is spent in vain, Mother, for I have not seen Thee! Another day of this short life has passed and I have not realized the Truth!"

Referring to this tremendous thirst for God, Sri Ramakrishna often said to his disciples later on: "Oh! what days of suffering I passed through! You cannot imagine my agony at the separation from Mother. That was only natural. Suppose there is a bag of gold in a room and a thief in the next, with only a thin partition in between. Can he sleep peacefully? Will he not run about and try to force through the wall to get at the gold? Such was my state. I knew that the Mother, full of infinite bliss, compared to which all earthly possessions were nothing, was there, quite close to me. How could I be satisfied with anything else? I had to seek Her. I became mad for Her."

Soon his desire was fulfilled. His first vision of the Divine Mother is best described in his own words: "I was then suffering from excruciating pain because I had not been blessed with a vision of the Mother. ...Life did not seem worth living. Suddenly my eyes fell on the sword that was kept in the Mother's temple. Determined to put an end to my life, I jumped up like a mad man and seized it when suddenly the blessed Mother revealed Herself to me and I fell unconscious on the floor. What happened after that externally, or how the day or the next passed, I did not know; but, within me there was a steady flow of undiluted bliss altogether new, and I felt the presence of the divine Mother."

After this tremendous vision, Sri Ramakrishna spent several months in a God-intoxicated state, during which he had innumerable spiritual experiences. He spent hours in meditation and ecstasy not only in the shrine of Kālī, but also under a cluster of five trees, the *pañcavaṭī*, which he had reared on the bank of the Gaṅgā to the north of the temple. His visions, emotional outpourings, and unconventional forms of worship led the temple authorities to think that he had gone mad. The news spread to Kamarpukur making his mother anxious for him. They decided to get him married hoping that it might bring his mind to the normal worldly plane. Sri Ramakrishna returned to Kamarpukur for a change. Not only did he not protest, but he

even actively co-operated with his mother in implementing the marriage proposal. Accordingly, in 1859, he was married to Sarada Devi, a six-year old girl of the neighbouring village of Jayrambati. It was just a betrothal; a unique betrothal which remained unconsummated on the physical plane, but was consummated in the spiritual plane by which she became, as the Holy Mother, the spiritual companion and helpmate of the great husband.

Sri Ramakrishna returned to Calcutta a little later, and immediately entered on a new chapter of systematic spiritual experiments and experiences, covering the various paths of the Hindu religion as expressed in the schools of *bhakti* and *jñāna*. In these he received spiritual help from two great wandering spiritual teachers, among others, viz. the remarkable woman saint Bhairavi Brahmani and the extraordinary Vedāntic monk Totapuri. The Bhairavi led him successfully through the Vaiṣṇava and Śākta paths and Totapuri through the *jñāna* path of Advaita. It was from the latter that Gadadhar is said to have got his name changed to Ramakrishna as part of the ceremony of monastic initiation.

In all these various spiritual paths, Sri Ramakrishna's success was quick and thorough. After finishing his experiments with the spiritual paths taught by the Hindu religion, Sri Ramakrishna felt a great longing to experiment with the paths of Christianity and Islam. Accordingly, he underwent initiations in these two religions by competent spiritual teachers of the respective paths, and experienced their truths in an incredibly short time. By 1872 Sri Ramakrishna had finished his diverse spiritual experiments and realized, through personal experience, the truth of the underlying harmony among the world's religions. His last spiritual act during this period of his life was the worship of the Divine Mother in the person of his wife Sarada Devi on the occasion of a *sōḍasi* puja.

Sri Ramakrishna's heart now became full with divine bliss which soon flowed into a powerful current of human concern. He felt an intense longing to share his spiritual experiences with sensitive seekers. And the seekers started coming from about 1875, first in a trickle then in a flow. With this, we enter into the third and last phase of his life when a veritable procession of spiritually sensitive people drawn from a wide variety of social levels and religious persuasions wended its way to the Dakshineswar temple to see this extraordinary spiritual teacher and hear his charming words. The teacher also, on his part, went out often to Calcutta to meet such people, "to commune with God in human form," as he expressed it. The room in the temple in which he lived and taught has since become a place of pilgrimage for East and West alike.

Among these seekers were distinguished religious leaders of the time like Keshab Chandra Sen of the Brahmo Samaj, agnostic scientific minds like Dr. Mahendralal Sircar, the founder of the Indian

Association for the Cultivation of Science, saintly devotees of humble origin like Gopaler Ma, and university students like Narendranath Dutta, who later became Swami Vivekananda (1863-1902), Sri Ramakrishna's world famous apostle and the founder of the Ramakrishna Math and Mission.

In the last year of his life, Sri Ramakrishna fell ill of throat cancer; and he spent the last eight months of his life in a house in the Cossipore area of Calcutta rented by his disciples to facilitate his treatment. Before he left his mortal coil on August 16, 1886, he had organized into a monastic order the band of his young disciples under the leadership of Vivekananda who took upon themselves the sacred responsibility of nurturing the universal spiritual message of their beloved master and conveying its blessings to the world at large.

Sri Ramakrishna represents the truth of the *parāvidyā* of the *Upaniṣads;* he did not go to school or college or books for education. Yet the great intellectuals of our universities found in him an intellectual giant. In him knowledge had flowered into wisdom and compassion.

In his lecture on 'My Master' delivered in New York in 1896, Swami Vivekananda conveyed his master's message in this brief utterance: "This is the message of Sri Ramakrishna to the modern world: 'Do not care for doctrines, do not care for dogmas, or sects, or churches, or temples; they count for little compared with the essence of existence in each man, which is spirituality; and the more this is developed in a man, the more powerful is he for good. Earn that first, acquire that, and criticize no one, for all doctrines and creeds have some good in them. Show by your lives that religion does not mean words, or names, or sects, but that it means spiritual realization.' . . .

"To proclaim and make clear the fundamental unity underlying all religions was the mission of my master. Other teachers have taught special religions which bear their names, but this great teacher of the nineteenth century made no claim for himself. He left every religion undisturbed, because he had realized that, in reality, they are part and parcel of the one eternal religion."

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RAJA RAMMOHAN ROY
(1772-1833)

BY

DILIP KUMAR BISWAS

Raja Rammohan Roy stands foremost among the many distinguished personalities that the district of Hooghly has produced since the second half of the eighteenth century. He was born in a respectable Brahmin family in the village of Radhanagar (near Khanakul-Krishnanagar) in the Hooghly district on May 22, 1772. Another view would place his birth two years later in 1774 but the former date is borne out by genuine family tradition and should be preferred. His great-grandfather Krishnachandra Bandyopadhyay (Banerji) had entered the service of the Nawabs of Bengal and had received the title of 'Raya-Rayan' presumably as reward for some distinguished services rendered to the Nizamat. This official title in the contracted form of '*Raya* (Roy)' had ever since replaced the original surname *Bandyopadhyay* (Banerji) of the members of the family. Of the three sons of Krishnachandra,—Hariprasad, Amarchandra and Brajabinode,—the last-named, who was the grandfather of Rammohan, served with distinction under Nawab Alivardi Khan and did much to help the Mughal emperor Shah Alam II (1759-1806) during the latter's stay in the Eastern Provinces. The family was a staunch adherent of the Vaishnava creed. Of the seven sons of Brajabinode, the fifth Ramkanta, the father of Rammohan married three wives, Subhadra, Tarini and Rammoni. Of these, the eldest Subhadra was childless, the second Tarini was the mother of a daughter (name not recorded) and two sons Jagamohan and Rammohan; and the youngest Rammoni had a son named Ramlochan. Rammohan's maternal grandfather Shyam Bhattacharya was a native of Chatra within Serampore town and was well known as a priest of the *Sakta-Tantrika* sect. Rammohan seems always to have cherished a feeling of respect for his maternal ancestors in his later life. Speaking of his ancestors on father's side he says in his famous autobiographical letter that "about one hundred and forty years ago" they had given up "spiritual exercises for worldly pursuits and aggrandizement;" at the same time he adds: "But my maternal ancestors . . . have up to the present day uniformly adhered to a life of religious observances and devotion, preferring peace and tranquillity of mind to the excitements of ambition, and all the allurements of worldly grandeur." It is also significant that though by birth Rammohan had thus inherited a combined legacy of the Vaishnava and Sakta religious traditions of Bengal, he seems always to have shown a preference for the philosophical tenets of the latter in the religious discussions of his maturer days.

After a period of service under Nawab Siraj-ud-daula of Bengal

Rammohan's father Ramkanta Roy had returned to Radhanagar to live the life of a retired householder. He took care of the schooling of his young son who seems to have displayed a keen intelligence and a prodigious memory at an early age. During his boyhood and early youth Rammohan received the traditional education of his country and soon acquired a remarkable proficiency in Arabic, Persian and Sanskrit. According to his biographers he learnt Arabic and Persian at Patna which was an important centre of Islamic learning at the time, and Sanskrit at Banaras. Some modern writers have hesitated to believe in the genuineness of the traditions regarding Rammohan's early visits to Patna and Banaras. But the Calcutta High Court Records connected with his law-suits as well as the Miscellaneous Revenue Records of the Banaras Commissioner's Office leave us in no doubt as to the point. It may be that his visits to these places were more than one and he continued his studies throughout the period covered by them. By the time he was about nine years of age his father had married him thrice in keeping with the usage of the *Kulin Brahmanas* of Bengal. The first wife died at a very early age; the second who became the mother of his two sons Radhaprasad and Ramaprasad died in 1824; the third survived him.

Rammohan's academic endeavours at Patna enabled him to acquire a profound knowledge of the different branches of Islamic theology. A study of the *Quran* in the original shook his faith in the popular idolatrous forms of Hindu worship and made him a life-long admirer of the uncompromising monotheism of Islam. He was further deeply impressed by the free-thinking and universal outlook of the rationalists (*Mutazali*) and the unitarians (*Muwahiddin*) of Islam. Subsequently with the progress of years and maturity he became enamoured of Sufi mysticism which has found so poignant an expression in Persian poetry. Traditional evidence points to Rammohan being of a religious bent of mind since childhood and a firm believer in the current forms of Hindu worship. His thorough acquaintance with the tenets of Islam had now shaken his faith in the image-worship sanctioned by popular Hinduism. This ultimately involved him in a theological conflict with his father and he had to leave home at about the age of fifteen or sixteen. Probably the next three or four years were spent by him in travel and religious quest in course of which he is said to have paid a visit to Tibet. Some modern writers are sceptical about the historicity of Rammohan's Tibetan Journey but it cannot be overlooked that he himself later described it *twice* to Dr. Lant Carpenter in London and Bristol. The Tibetan visit possibly gave him some insight into the principles of Mahayana Buddhism as well as into its later decadent phases including Lamaistic manworship. A message of recall from his father enabled him to return home but no lasting reconciliation between father and son was possible on the religious issue. Afterwards Rammohan pro-

ceeded to Banaras where he made a profound study of the *Jnana-Kanda* of Hinduism particularly of the *Upanishads*, the *Brahmasutras* with the commentary of Samkara and the Gita. These studies convinced him that the concept of unity of Godhead was the essence of Hinduism and the current idolatrous worship was a disgusting aberration of later growth. It should also be noted that about the same time he made an extensive study of the philosophy of the *Tantra* under the influence of the celebrated *Tantrika* ascetic Hariharananda Tirthaswami, a native of the village of Palpara in the Hooghly district whom he had known intimately from the age of fourteen.

The steady development of Rammohan's distinctive religious and social outlook gradually widened the gulf between himself and his family. About 1792 Ramkanta Roy moved with his family from Radhanagar to live in a new house that he had built in the adjoining village of Langulpara. Towards the end of 1796 the bulk of his immovable property was divided among his three sons by a deed of partition under the provision of which the house at Langulpara was assigned jointly to Jagamohan and Rammohan and Ramkanta's share in the ancestral house at Radhanagar to the youngest brother Ramlochan; the entire taluk of Harirampur went to Jagamohan and Ramkanta's house at Jorasanko in Calcutta was alloted to Rammohan. This must have given the latter a much-needed opportunity of bringing the painful chapter of family conflict to a close by gradually separating himself from his brothers. In 1797 he came to Calcutta and started business in money-lending as well as in Company's papers. This marked the beginning of a successful and prosperous career in business and service which enabled him to purchase in 1799 the taluks of Govindapur and Rameshwarpur (both in the district of Burdwan) yielding thenceforth a steady annual income of Rs. 5,500/; and subsequently the four *patni* taluks of Langulpara (in 1803-04), Birluk (in 1808-09), Krishnanagar (in 1809-10) and Srirampur (in 1809-10) that assured him of a further annual income of five or six thousand rupees. By 1814 he had transferred his half-share in the paternal house at Langulpara to his nephew Gurudas Mukherji and in 1817 moved with his family to a new house that he had built independently in the neighbouring village of Raghunathpur. It should be remembered that by separating himself from his brothers Rammohan was only following a family tradition as the High Court records connected with his law-suits clearly indicate that the custom of brothers living separately was current in the Roy family at least from a generation earlier.

Besides providing him with a suitable field for independent earning Calcutta opened up before the eyes of the young inquirer new horizons of enlightenment. The chief Quazi of the *Sadar Diwani Adalat* and the learned Maulavis of the Fort William College were full of

admiration for the brilliant young man. It is also here and about this time that he first came in contact with cultured Europeans and began his systematic efforts to learn English. In 1801 he made the acquaintance of Mr. John Digby, a civilian in the Company's service, who ultimately proved to be one of his best friends and well-wishers among Englishmen. It was his greatness to have realized that the newly established foreign government in this country represented a great civilization with a superior technology and a new set of values from which India must take the necessary corrective at the moment if she was to adjust her own cultural and spiritual values to the needs of modern life. This, and not the desire to make money, for he was already on the road to prosperity through business and the income accruing from his landed estates—had led him to seek the company of cultured and educated Englishmen by accepting official or private jobs under them. In 1803 he held the post of dewan under Mr. Thomas Woodforde, collector of Dacca-Jalalpore for a short period of three months but resigned presumably on hearing of his father's serious illness. Ramkanta Roy died in the same year. After performing his father's *sraddha* separately at Calcutta Rammohan later went to Murshidabad as the private *munshi* of Mr. Woodforde who had been appointed Registrar of the Appellate Court there from August 1803. Here in 1803-04 he published his first known work *Tuhfat-ul-Muwahiddin* (A Gift to Monotheists) a treatise in Persian with a preface in Arabic. Some sources mention an earlier work supposed to have been composed by Rammohan at the age of sixteen criticizing popular Hindu idolatry; the *Tuhfat* itself refers to an earlier Persian work of his entitled *Monazarutul Adyan*. These works have not come down to us either in manuscript or in printed form. In the *Tuhfat* he takes the position of a complete deist in religion declaring open war on all forms of Scriptural authority, priestcraft, idolatry, ritualism and superstition, and holding up rational faith in the existence of a Creator and Moral Governor of the universe as the common foundation of religion. From 1805 to 1809 he was in the service of John Digby and accompanied him successively to Ramgarh, Jessore and Bhagalpur remaining for the most part in Digby's private employment and only holding the official job of *sherishtadar* at Ramgarh for three months. From 1809 to 1814 Mr. Digby served as the collector of Rangpur. From November 1809 to March 1810 Rammohan held the official post of dewan under Dibgy at Rangpur. His appointment not having been sanctioned at first by the Board of Revenue he had to go back temporarily to the private employment of Mr. Digby. Soon however he was reinstated as dewan at Rangpur and stayed there in that capacity till 1815. During this period he visited Bhutan on a diplomatic mission as an envoy of the British Government. Towards the end of 1815 he finally quitted the service of the Company, and settled down in Calcutta. His long and intimate

association with British civilians, particularly with his admiring employer Mr. Digby and his stay at Rangpur constitute a remarkably formative phase in his career. He not only vastly improved his knowledge of English but gained considerable knowledge of European literature, philosophy and contemporary western politics during this period. He was particularly impressed by the two great contemporary movements,—the war of American Independence and the French Revolution and naturally his studies in western thought were directed at this stage to the literature of rationalism and enlightenment that inspired these great historical upheavals. On the other hand he held at Rangpur frequent discussions and controversies with exponents of Hindu, Muslim and Jaina orthodoxy thus anticipating the task of religious reform and reconstruction which he was to take up in near future in Calcutta.

Throughout his service career outside Rammohan had maintained regular contact with Calcutta and his native village through periodic visits. His business in the capital city had prospered steadily. Though his paternal house at Jorasanko had probably been sold off sometime between 1805 and 1815, by the latter year he had come to possess three other houses in the city, at Chowringhee, Simla and Maniktala respectively. He now opened his Calcutta career in right earnest throwing an open challenge to the forces of orthodoxy and obscurantism and trying to live the philosophy which he had so long preached and discussed. In 1815 he started the *Atmiya Sabha* together with a number of his friends who held liberal views on religious and social matters, like Dwarkanath Tagore, Brajamohan Majumdar, Haladhar Basu, Rajnarayan Sen, Brindaban Mitra, Baidyanath Mukherjee, Raja Kalisankar Ghosal, Gopimohan Tagore, the anchorite Hariharananda Tirthaswami and others. Sittings of the association were held alternately at the residence of members. The proceedings contained recitation from the *Vedas* and the *Upanishads* followed by discussions on the futility of idol-worship, evils of the caste-system, the practice of *Sati* and polygamy, desirability of the introduction of the remarriage of Hindu widows etc., and religious songs. A look at the list of subjects discussed would convince anybody that religion for Rammohan was not a narrow personal creed but an all-comprehensive elevating principle operating in every sphere of individual, social and national life. The concept of this close link between religion and human society is a characteristic feature of Rammohan's outlook as a reformer which distinguishes him from the ancient and medieval religious thinkers of this country. This essentially modern trait can be regarded as a direct outcome of his study of contemporary western thought. The *Atmiya Sabha* remained active in Calcutta from 1815 to 1828 and was in a real sense the precursor of the *Brahmo Samaj*. In order to vindicate his position as a monist and monotheist as also to demonstrate the fallacy of

idolatrous worship—Rammohan now started publishing his interpretative studies of the Hindu Scriptures in Bengali with English and Hindi translations. The *Vedantagrantha* (1815) an elaborate commentary on the *Brahmosutras* was followed by the *Vedantasara* (1815) and the translations of the five *Upanishads—Kena* (1816), *Isa* (1816), *Katha* (1817), *Mandukya* (1817) and *Mundaka* (1819). He had also published a Bengali verse-translation of the *Gita* but this has not come down to us. In his interpretation of the *Vedanta* he has been deeply influenced by Samkara and mainly sticks to the latter's position except on three points, viz. (*a*) he has laid much greater emphasis on *upasana* (prayer and adoration); (*b*) he declares *brahma-jnana* (realisation of the Supreme Being) and *moksha* (final liberation) to be within reach of householders (*grihasthas*) and no monopoly of *sanyasins* or world-renouncing hermits; (*c*) he assigns a much more prominent role to *maya* as the creative power of God probably under the influence of the *saktivada* of the *Tantra* which he had studied extensively. During this phase of his religious life he had however shifted his position in one respect from the complete rationalism of the *Tuhfat* in admitting the validity of Scriptural authority that represents the 'collective wisdom' and experience of the race. Rammohan's attacks on Hindu idolatry drew forth protests from orthodox circles and he was involved in a number of polemical controversies with conservative opponents including Pandit Mrityunjaya Vidyalamkar, Pt. Utsavananda Vidyavagis (whom he succeeded in converting to his views), Pt. Subrahmanya Sastri and others. Incidentally, it may be noted that through his publications in the Bengali language Rammohan had moulded Bengali prose into a shape which made it eminently suitable for discussion of serious subject even of abstruse philosophical nature. The clarity and originality of his thought are well reflected in his style which succeeded in setting up a norm of compact and logical prose that has remained in force ever since in the field of Bengali literature. In this respect it was something new and a distinct advance on the earlier prose of the christian missionaries and the pandits of the Fort William College. The publication of a Bengali grammar first in English (1826) and later in Bengali (1833) further ranks him among our earliest instructors in the Bengali language.

Rammohan's enquiries into the basic dogmas of Christianity started probably after his final settlement in Calcutta. As one who inspite of his adherence to *Advaita-Vedanta* had placed the greatest possible emphasis on the temporal world and the individual's role in it, Rammohan needed a comprehensive set of ethical values to guide our social behaviour and here he drew inspiration from the moral precepts of Jesus Christ though the metaphysical doctrines of Trinitarian Christianity appeared to him as scarcely better than popular Hindu idolatry. The case was very ably argued by him in

his *The Precepts of Jesus* (1820) and the three *Appeals to the Christian Public* (1820, 1821 and 1823) in the face of mounting missionary criticism coming mainly from the Baptist Mission, Serampore. The controversy was continued in the pages of Rammohan's English-Bengali periodical *Brahmana-Sevadhi—Brahmanical Magazine* and terminated in 1823 with the Indian reformer having the decided advantage in the dispute. In order to read the Christian scriptures in the original he had learnt Hebrew and Greek and in course of the controversy succeeded in converting Rev. William Adam of the Baptist Mission to his own view. Adam had become a unitarian Christian and for some time Rammohan and his friends became closely associated with the two unitarian organizations of the city, viz. the Calcutta Unitarian Committee and the British Indian Unitarian Association.

His distinctive interpretation of the Vedanta as well as his study of the spiritual and rationalist traditions of European and Islamic thought had inspired Rammohan with the ideal of service to humanity and we can trace all his endeavours for social, educational and political reforms to this single source. As a reformer he believed that the urge for reform must come gradually from within and gentle persuasion was far more effective as a means of reform than legislative coercion. In this spirit he organized his movement against the evil custom of *sati*, roaming about in the burning ghats of Calcutta and trying to prevent widows from immolating themselves by argument and persuasion. He also published tracts in Bengali (also English translations of them) advocating the abolition of *sati* in 1818, 1819 and 1829. When finally the Regulation for the abolition of *sati* was passed on December 4, 1829, Rammohan and his liberal friends hastened to present an address of thanks to Lord William Bentinck. All these made him a target of attack from the hostile camp. Wildest accusations and filthiest abuses were hurled at him and attempts were even made on his life Rammohan was convinced that India could hope to build her future on progressive lines only with the help of western science and technology. This conviction had made him a staunch advocate of the introduction of western education in this country. We are informed by the *India Gazette* of February 15, 1834, that even before the establishment of the Hindu College in 1817 Rammohan had established an English Free School for the education of Hindu children. Further as early as 1816 or even earlier he had offered Eustace Carey a piece of ground for starting a school. He was a warm supporter of David Hare's project for establishment of the Hindu College but was prevented from joining its body of Directors due to strong conservative opposition. In 1822 he opened through his individual initiative the Anglo-Hindu School which had subsequently a distinctive record. The next year saw him write his famous letter advocating the introduction in India of instructions in

"Mathematics, Natural Philosophy, Chemistry, Anatomy, and other useful sciences which the Nations of Europe have carried to a degree of perfection," to Lord Amherst. In 1830 he substantially assisted Rev. Alexander Duff to start the latter's school in Calcutta. An admirer of the French Revolution, Rammohan was a believer in the principle of liberty. He was accordingly an ardent supporter of the freedom struggles against absolutism and tyranny then going on in the different parts of the world. Thus the Spanish colonies in South America struggling against the tyranny of Spain, the Neapolitan rebels crushed under the wheels of Austrian imperialism, the liberal sponsors of the Cadiz Constitution of 1812 in Spain, the constitutionalists in Portugal fighting Dom Miguel—all had a warm supporter in this man of "cosmopolitan sympathies". It is thus no wonder than India would owe to him her first experiments in political agitation. One of the pioneers of Indian journalism he boldly voiced the grievances and rights of the people through his Bengali and Persian Weeklies *Sambad Kaumudi* (1821) and *Mirat-ul-Akhbar* (1822). He also was the first to fight for the liberty of the Press by submitting along with his friends a spirited memorial to the Supreme Court and an appeal to the King in Council against John Adams' Press Ordinance of 1823. In November 1826 he had sponsored a petition to the British Parliament on behalf of the Hindu and Muslim inhabitants of India protesting against the Jury Act of 1826 which made "civil discriminations between different religious beliefs." A brief reference also may be made to the fact that Rammohan had suggested an important line of reform of the Hindu Law through his two important publications entitled *Brief Remarks regarding Modern Encroachments on the Ancient Rights of Females according to the Hindoo Law of Inheritance* (1822) and *Essay on the Rights of Hindoos over Ancestral Property according to the Law of Bengal* (1830) with its supplement *Letters on Hindoo Law of Inheritance*. We must also take note of the firm support that Rammohan gave to the movement in favour of colonization of India by Europeans in large number. He was of definite opinion that the import in large measure of European 'character' and 'capital' into this country would lead inevitably to the introduction of enlightened method of agriculture and business leading to the ultimate prosperity and stability of the nation,—may be, in spite of a few initial disadvantages.

The establishment of the *Brahmo Samaj* in 1828 brought to a focal point this comprehensive scheme of religious, social, intellectual and political transformation of India as visualized and formulated by Rammohan Roy. Rammohan's universalism in religion was based on a historic synthesis of the doctrine of self-knowledge of the *Vedanta*, the message of social equality preached by Buddhism (as expressed in his translation of the Mahayana Buddhist text *Vajrasuchi* in 1828), the emphatic monotheism of Islam, the simple piety of the saints

of the medieval Indian *bhakti*-movement and the sublime ethics of Christ. But he believed at the same time in the preservation of traditional continuity and was seeking to establish a religious organization of a universal as well as *Hindu* character. The church was first established in a rented house at 48 Upper Chitpore Road. Two years later it was shifted to its own building at 55 Upper Chitpore Road. The earliest form of service in the Brahmo Samaj consisted of the reading of the *Vedas*, exposition (in Bengali) of the *Upanishads* and devotional songs (*brahmasangita*). These essentially Hindu traits would correspond exactly to the reading of the Bible, the sermon and the singing of hymns in Christian worship. Hindu worship being individualistic, the congregational form had to be borrowed from Christianity and here Rammohan's previous association with Unitarian Christianity had really proved useful. The universal character of the creed of the new church is well reflected in its Trust Deed, drawn up by Rammohan and his few friends including Dwarakanath Tagore, Prasanna Kumar Tagore and Ramchandra Vidyavagis, which lays down that the institution was to be run on strictly monotheistic and nonsectarian principles and its worship could be joined by any one irrespective of his or her sectarian affiliation. The worship of the One Supreme God and the ideal of compassion towards and service of all creatures were declared to be the two major principles of the new religion. Thus the Brahmo Samaj had been launched into its eventful career with the aim of making religion more social and society more religious. It had given modern India her first synthetic approach to religion and had also set a model before the nineteenth century by harmonizing the ideal of service with man's personal faith.

The last three years of Rammohan Roy's life (1830-1833) were spent in England. As early as in 1816 or 1817 he had formed the plan of an immediate visit to England and had written to Mr. Digby who was then in England to that effect. The chief motive of the intended visit according to the contemporary evidence of Lt. Col. Fitzclarence (Lord Munster) was Rammohan's desire to enter one of the English universities as a student no doubt in order to gain a first-hand acquaintance with European learning. Fate however willed that his desire would be realized under totally different circumstances during the last lap of his life's journey. In 1829 he was chosen by Akbar II, the nominal Mughal Emperor of Delhi then living on British pension, as his envoy to the King of England, briefed to seek an increase in the amount of the pension. In this connexion the Emperor conferred on Rammohan the title of Raja. Besides this official mission the appeal to England of the conservative anti-*Sati*-abolition group against Bentinck's Regulation abolishing *Sati* furnished another reason for Rammohan's intended English visit. He naturally thought that "his presentation of counter-memorials and personal influence"

would help to thwart their endeavours in England. Finally he wished to be present in England on the occasion of the renewal of the East India Company's Charter in 1833 so that he could exert his personal influence to "shape the new Charter more favourably to Indian needs." Mainly with these ends in view he sailed for England by the ship 'Albion' along with three attendants and his adopted son Rajaram on November 19, 1830, landing at Liverpool on April 8, 1831. He succeeded during his stay in England in carrying out his three missions. By his ceaseless endeavours he succeeded in persuading the British Government in adding three *lacs* of rupees annually to the stipend of the Mughal king of Delhi. In 1832 the Parliament finally rejected the appeal against the abolition of *Sati*. The Select Committee of the House of Commons appointed to consider the renewal of the Company's Charter invited him as an authority on all Indian questions to give evidence before it. His communications in this respect were published in 1833 in the form of a book entitled *Exposition of the Practical Operation of the Judicial and Revenue Systems of India and of the General Character and Condition of Native Inhabitants* in which he appears as the champion of 'the toiling and oppressed masses' in India. Enlightened Indian contemporaries have recognized that India is indebted for the best clauses of the renewed Charter of 1833 to Rammohan Roy. Apart from the fulfilment of these avowed missions Rammohan's English visit has a deeper significance. "Rammohan Roy's presence in this country," says his English biographer, "made the English people aware as they had never been before, of the dignity, the culture and the piety of the race they had conquered in the East. India became incarnate in him and dwelt among us, and we beheld her glory." He received a warm and respectful welcome in all circles of English society from the aristocratic peers down to the factory labourers. While in India, mainly in the third decade of the nineteenth century, he had come in close contact with English Utilitarian thought as represented by Jeremy Bentham and James Mill. Apart from theoretical studies, contact and friendship with representatives of Utilitarianism in India and England including Bentham himself (sometimes through correspondence) had served to strengthen the bond. Now in England his visit was hailed by the Utilitarians and even the aged Bentham made a call on him. His progressive views on political and social issues and the enthusiastic support he gave to the Reform Act of 1832 made him very popular with the contemporary Whig politicians and by virtue of the refined delicacy of his manners and his natural suavity he felt equally at home among Tories in spite of his fundamental disagreement with the latter. He had discussions and arguments with Robert Owen, the father of British Socialism and though he could not accept Owen's total rejection of religion, he expressed warm approval of the practical aspects of the former's socialistic programme. As a student and interpreter

of liberal Christianity he naturally made deep impression in English Christian circles particularly among the Unitarians. The latter gave him a public reception hailing him as the 'Apostle of the East.' In 1832 he paid a short visit to France, a country he deeply respected as the home of revolutionary liberty. He was already well known to the intellectual and academic circles of France and as early as in 1824, had been elected an honorary member of the French Asiatic Society. He now received a royal welcome in Paris. The letter he wrote to the Foreign Minister of France on the eve of his Paris visit expresses his firm faith in the unity of the human race and shows him to have cherished the idea of formation of a world-organization of nations of the type of the League of Nations and the United Nations Organization. This very brief account of his multifarious activities in Europe as well as of the honours he received, would prove how worthily he had represented the Indian civilization in the west.

It is sad to reflect that the ceaseless labours in the cause of his country as well as monetary distress due to the failure of the firms that served as his agents in India and England, ultimately broke his health and struck him down with a fatal malady. He died on September 27, 1833 at Bristol surrounded by his Unitarian friends including the venerable Dr. Lant Carpenter as well as by the members of the family of David Hare, his friend and comrade-in-arm in Calcutta. The story of his great life however amply justifies his biographer's remark: "Rammohan stands in history as the living bridge over which India marches from her unmeasured past to her incalculable future."

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ACHARYA BROJENDRANATH SEAL
(1864-1938)

BY

JITENDRA MOHAN MOHANTY

Acharya Brojendranath Seal, eminent philosopher, scholar and educationist was born in Calcutta as the second son of Mahendralal Seal, a lawyer of the Calcutta High Court. Brojendranath was educated in the General Assembly's Institution, from where he passed the B.A. examination in 1882 with first class Honours. In 1884, he passed the M.A. examination, securing the first place in Philosophy. He successively held appointments as: lecturer in English literature, City College, Calcutta, from 1882 to 1884; Professor and subsequently Principal, Morris College, Nagpur, 1885-87; Principal, Coochbehar College, 1896-1913; King George V Professor of Philosophy, Calcutta University, 1913-1920; and Vice-Chancellor, Mysore University, 1920-26. His other academic honours include: inauguration of the Indian section of the International Congress of Orientalists, Rome, 1899; inaugural address at the International Race Congress, London, 1911; inaugural address at the foundation of the Viswa-Bharati, Santiniketan, 1921; and membership of the Simla Committee for drawing up the New Regulations of the Calcutta University, 1905. His notable administrative achievements are: drafting of the constitution of the Mysore State as the Chairman of the Committee on Mysore Constitutional Reforms, 1922-23; chairmanship of the Mysore Committee on State Aid to Industries, 1924; Membership of the Executive Council, Mysore Government, 1925-26.

Brojendranath Seal's scholarly interests had a most extraordinary range: he was well-versed in Mathematics, Experimental Psychology, Oriental and Western Literatures, Fine Arts, classical languages, Anthropology and, of course, Philosophy. His published works include—besides papers and addresses on a wide variety of topics—*New Essays in Criticism*, *Positive Sciences of the Ancient Hindus* (1915) and *A Syllabus of Indian Philosophy*. He is also a co-author of P. C. Ray's *History of Hindu Chemistry*, Vol. II (1911) and the author of a poetical work *Quest Eternal* (1936).

Brojendranath Seal was, in his philosophic belief, at first a Hegelian, and subsequently—partly under the influence of Comte's thought—became a humanist. In his own words (which he used to characterize Raja Rammohan Roy), he was the "Humanist pure and simple evaluating from his conning tower the procession of Universal Humanity in Universal History." He—as all indications show—was working towards a comprehensive metaphysical system, but could not complete the work, partly owing to his rather unattainable ideal of perfection, and partly owing to the bad health which made his last

years' sufferings painful. Consequently, his scholarship and wisdom have not found adequate expression in his published writings.

UPADHYAYA BRAHMABANDHAB (1861-1907)

BY

NIRMAL SINHA

Son of Debicharan Bandyopadhyaya, Bhavanicharan Bandyopadhyaya, better known as Upadhyaya Brahmabandhab, was born at Khanyan in Hooghly on 11 February 1861. He passed the Entrance Examination from the Hooghly Collegiate School at the age of 15. After entering the Hooghly Mohsin College in 1875, he seriously studied Bengali and Sanskrit literature and took an active interest in physical exercises and outdoor games. The same year he came under the influence of Anandamohan Basu and Surendranath Banerjee, both organizers of the Students' Association in Calcutta. Young Brahmabandhab, unimpressed by Surendranath's plea for constitutional agitation, believed that Indian freedom could be achieved "not through pen but through sword." Led by this belief, he decided to undergo military training to realize the ambitious purpose of expelling Europeans from India. In 1877, he tried in vain to serve as a soldier in the Zulu War. Then he twice ran away from home to join the Gwalior army, but his attempts, the second of which led to the discontinuance of his studies at the Metropolitan Institution, proved abortive.

In 1881, while working as teacher first at the Memari School and then at the Free Church Institution in Calcutta, he came under the influence of Keshab Chandra Sen and became a staunch supporter of the latter's *New Dispensation*. On 6 January 1887, he was formally initiated into the Brahmo Samaj.

The regenerative activities of a group of young men in Calcutta at this time found in Brahmabandhab a keen supporter. As Sanskrit teacher in their Eagle's Nest, a society founded in 1883 to promote serious study and discussion among students, he became their most dedicated worker. Their organ, the *Young Man*, was edited by him in co-operation with Nandalal Sen. He was also the livewire of the shortlived Concord Club, the successor of the Eagle's Nest, and was intimately associated as Manager with its organ, the *Concord* (1886-87), which was edited by his uncle, the Rev. Kalicharan Banerjea.

Hyderabad in Sind became the next venue of his activities. He went there in 1888 to work as Sanskrit teacher at the Union Academy on the invitation of his friend, Hirananda. But his increasing predi-

lection for Christianity brought about a rift between him and the school authorities, and he resigned in May 1890. Though a Brahmo, he disseminated the message of Christ through his monthly, *The Harmony*. To him, Keshab Chandra Sen's *New Dispensation* did not differ in spirit from the fundamental tenets of Christianity. On 26 February 1891, he allowed himself to be converted to Christianity by Mr. Heaton, a priest of the Anglican Church at Hyderabad. But his aversion for State control over the Anglican Church led him, on 1 September the same year, to enter the Roman Catholic Church under the guidance of Father Theophilus Perrig. In December 1894, he assumed the name of Upadhyaya Brahmabandhab (his baptismal name being Theophilus meaning Brahmabandhu). In spite of this conversion, he called himself 'a Hindu Catholic' and lived like a *sannyasi* (mendicant), barefooted and barebodied but for a simple saffron cloth over his shoulder.

As editor of the *Sophia*, the monthly organ of the Catholic Church from January 1894 to March 1899, Brahmabandhab endeavoured from Karachi to prove that pure theism was to be found, not in the Vedanta, but in the Gospel. The pantheon of Hindu deities believed the existence of theism in the Vedanta. Through the columns of the *Sophia* he attacked not only Vivekananda for adding one more divinity in the person of Ramakrishna to the Hindu pantheon, but also Annie Besant for misrepresenting the Vedas and the Upanishads in her attempt to glorify Hinduism.

In January 1897, he did admirable relief-work among the plague-stricken inhabitants of Karachi, with supreme indifference to all personal hazards.

In 1899, he established a monastery at Jabbalpur with the intention of making Catholicism wear a 'Hindu garment'. But it had to be abolished on account of the Church's opposition. His declaration that he was a Catholic by faith but a Hindu by birth as well as in manners and customs was repugnant to the European Catholic mind. However, it was at Jabbalpur that Brahmabandhab realized through meditation and serious study the irrefutable theism innate in the Vedanta. He thus emerged from his monastery as a 'Catholic Vedantic'.

After his return to Calcutta in 1900 he preached Vedanta philosophy through the shortlived journals, the *Sophia* (weekly) and *The Twentieth Century* (monthly), both of which discussed political problems as well much to the dislike of the Church. His criticism of Catholicism, which wanted to live as an exotic plant in India, and of the Christian missionaries, who were dead to the political aspirations of the Indians, was frowned upon by the Catholics. This charge was repeated by him while he was in London in 1903.

Not merely the Catholic Church, but Indian universities as well had to be national in character, according to Brahmabandhab.

Indians, he wrote, should erect their own universities where European thought and ideals should be made subservient to Hindu thought and ideals. The domination of the former over the latter had to be ended in the interest of the national culture. Thus, in December 1901, he went to Bolpur to help Rabindranath Tagore establish the *Brahmacharya Vidyalaya* where boys were to be trained in Vedic ideals. He himself founded in 1902 the shortlived *Saraswat Ayatan* in Calcutta with the same end in view.

After the death of Vivekananda, Brahmabandhab went to England to preach Vedantism. He stayed there from November 1902 to June 1903, delivering lectures at Oxford, Cambridge and London on *Hindu Thought, Hindu Theism, Hindu Sociology* etc.

He returned to Calcutta in July 1903 a staunch nationalist and an uncompromising opponent of British culture and British rule. His speeches in Calcutta (1904) on the teachings of *Sri Krishna* threw in clear relief his deep faith in the Bhakti cult.

In November 1904, he launched his popular daily, *Sandhya* which became one of the most virile organs of the nationalists or extremists in Bengal before its closure in 1907. He condemned the *Feringhi* (European) system of education which made the English-educated Indians loyal to the British Government. The Calcutta University under official control was to him the '*Goldighi's golamkhana*'. This made him the most vocal spokesman of the National Council of Education established in Calcutta in March 1906. His *Sandhya* became a strong prop of the anti-Partition agitation. To the boycotters of British goods it was an unfailing source of inspiration. Police repression at the Bengal Provincial Conference at Barisal (14-15 April 1906), which was attended by Brahmabandhab, sharpened the extremist tone of the *Sandhya*. Brahmabandhab was the highpriest of the Sivaji festival celebrated in Calcutta (4-6 June 1906) by the extremists, including Tilak, Dr. Munje and Khaparde of Bombay. His extremist spirit led him to support the strike of the 'native' employees in the East Indian Railway in 1906. In November 1906, he asked his countrymen to demand and fight for the attainment of complete independence (*swaraj*) and to lead a life of freedom under their own *swadeshi* system of administration, of education, of judiciary and of trade and commerce The Congress moderates' agitation for self-government of the colonial type was repugnant to him. He wanted Indians to spit upon rights granted by the Feringhis as a favour. After Dadabhai Naoroji, President of the Calcutta Congress in 1906, had openly supported the goal of *swaraj*, the boycott and the cause of national education, Brahmabandhab, inspired by the spirit of *Bande Mataram*, brought out a pictorial weekly under the name of *Swaraj* on 10 March 1907.

The rise and spread of the extremist spirit alarmed the Government. The first *Sonar Bangla* pamphlet, suspected to have been

printed in 1907 at the *Sandhya* Press, accentuated this alarm. Like the editors of the *Jugantar* and the *Bande Mataram*, Brahmabandhab also had to face trial under Section 124A of the Act of 1898 in the court of Mr. Kingsford, Presidency Magistrate, for the publication of seditious articles. In his deposition before the court on 23 September 1907, he accepted "the responsibility of the publication, management and conduct of the *Sandhya*" and owned that he was the writer of the article '*Ekhan Theke Gechi Premer Dai*' (13 August 1907). But he added that in carrying out his share of the "God-appointed mission of *Swaraj*" he was not in any way accountable to the alien rulers, whose interest stood in the way of India's national development.

Just before the trial he performed the *prayaschitta* (expiation) ceremony at Kalighat, put on the sacred thread of the Brahmin and returned to the faith of his forbears. In course of the painful trial he fell ill and was removed to the Campbell Medical Hospital on 21 October, where he was operated upon for hernia. He passed away on 27 October 1907.

Educationist, preacher and journalist, Upadhyaya Brahmabandhab was one of the leading apostles of militant nationalism in the history of resurgent Bengal. The return of this 'Hindu Catholic' to the purely Hindu fold, changing on the way his scorn for the Vedanta into deep reverence and restoring Ramakrishna in his heart from the heap of discarded religious tricksters to the status of a divinity embodying the highest fulfilment of theism, has added a colourful chapter to Bengal's history of nationalism. His spirit of militant nationalism found expression in his worship of the Mother as *Bhawani*. The Christian spirit of passive resistance as depicted in the '*Quo Vadis*' was not his ideal. To shatter the racial pride of the British, who ruled over India through their well-armed 'white' regiments and by keeping Hindus and Muslims separate, he urged his countrymen to develop the spirit of militant nationalism by following in the footsteps of the Japanese.

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APPENDIX—B

CHRISTIAN MISSIONARIES IN HOOGHLY DISTRICT*

BY

SASHI BHUSAN CHAUDHURY

Missionary writers give a frightful picture of Calcutta and its environs in the mid-eighteenth century, of human corpses lying in various stages of decay all around the bank of the Hooghly (Bhagirathi), of the horrible carnage of Hindu widows at the funeral pyre of their husbands, of half-naked fakirs roaming viciously in the streets, of Hindu mothers casting their infants into the streams and of disgusting celebrations in honour of evil-looking idols.[1] This, according to Christian writers, made out a case for missionary enterprise in India, the great work of conveying to the millions of people enslaved by a mighty system of superstition and cruelty the supreme 'Knowledge of salvation through a crucified Saviour.'[2]

But to see missionary activities in their true perspective, it is, however, necessary to set them not only against the background of prevailing heathenism of India as reflected in missionary writings, but also against the dissolute atmosphere of Anglo-Indian society. The English settlers of early times usually led a godless life. In their personal lives they were a reproach to their countrymen. Immorality, gambling, violence and drunkenness of the British traders had tarnished the fair name of Christianity and made the faith extremely odious to the Indians.[3] Complaints were made about their way of life, particularly against the excesses committed by the early British traders which were too well known, by interested members of the Company's staff, who pressed home the demand for Christian Ministers[4] to look after the moral welfare of the servants of the Company. Indeed, the new charter granted to the second East India Company in 1698 had a clause in it which required the Company to maintain a chaplain and a school master wherever a European regiment was stationed. It was further enacted that the chaplains of the Company should qualify themselves to afford Christian instruction to their Hindu and Portuguese servants in their native languages.[5] But the new chaplains were hardly able to improve the moral standard of the European settlements. They received small salaries and were obliged to eke out a livelihood by engaging in business. Some of

*The activities of the Catholic missionaries in the district have been dealt with in Chapter XIII.

them even amassed big fortunes which could hardly have been accumulated from the ordinary wages of clerical labour.[6] The few clergymen who were in Bengal before the battle of Plassey could not leave any mark in the field of their work.

The chaplains were also debarred from embarking upon any missionary activities as the Protestant nations who had recently overthrown the power of the Spaniards and the Portuguese could not possibly share the Catholic idea of preaching the Gospel among the conquered people. The East India Company also had other reasons to discourage missionary enterprise because the ascendancy in Bengal which they were struggling to maintain could hardly have been possible by a strict adherence to the doctrine of Ten Commandments or by pressing the 'gunboat' into the service of Christianity. The idea that the work of conversion was God's worked well with the servants of a private commercial enterprise. Therefore, the clause in the charter regarding chaplains, as mentioned above, though somewhat indicative of a recognition to the need of Christian instruction was however not followed up and the evangelists made it a point of complaint against the Company that they seem to have forgotten that such a provision had ever been made.[7]

This anti-missionary policy of the Company found expression in various statements of the authorities particularly in the one issued by a member of the Court of Directors in 1793 which ran as follows: The sending of missionaries to our Eastern territories is the most wild, extravagant, expensive, unjustifiable project that was ever suggested and that it would affect the ultimate security of our Eastern possessions.[8] The Company's Government allowed itself to adopt this view which was also reflected in the behaviour of the Company towards the missionaries.[9] It was even proposed that a servant of the Company would be proscribed who should offer pecuniary aid or countenance to missions but the order was not enforced.[10] These despotic proceedings contrary to the principles of religious liberty were very much resented by the evangelists in England and when the charter of the Company was renewed in 1793 Wilberforce tried to secure a clause stating that it was the peculiar and bounden duty of the British legislatures to promote by all just and prudent means the interest and happiness of the inhabitants of the British Dominions in India, and that for these ends such means ought to be adopted as may gradually tend to their advancement in useful knowledge, and to their religious and moral improvement.[11] The India House raised such an alarm that the clause was thrown out and for 20 years the Company had the power of excluding missionaries.

Most of the European missionaries had the utmost contempt for the Hindus and their religion and it was natural, therefore, that the Directors should justify their views by stressing the need for a more tolerant attitude towards alien religions which the missionaries

unfairly condemned without understanding them. Till up to a later age the tendency was to regard the Company's Government as a superstructure imposed upon Indian society by the requirements of commercial policies and so the Company hesitated to disturb the existing arrangements by any violent innovation or by the use of its knowledge of social and technical changes. The history of the Portuguese rule in India, its intolerance of the native faith, and the eventual *elimination of the Portuguese power from India, attributed mainly* to the missionary zeal of the Catholic priests, were factors which dictated caution to the British Parliament and accordingly the East India Company was given power by the charter of 1793 to regulate the activities of the missionaries which the civil authorities rigidly enforced.

But the latter half of the eighteenth century which witnessed the foundation of the official church in the United Kingdom brought about a change in the attitude of the Englishmen who now realized the need of propagating the Gospel in India. In quick succession three important proselytizing societies were founded, the Baptist Missionary Society in 1792, the London Missionary Society in 1795 and the Church Missionary Society in 1799. The zealous and ardent missionaries now came forward to challenge the Government that while the non-Christian rulers in Asia gave the missionaries permission to preach the Gospel in their kingdoms, it remained for the Protestant Christian England alone to deny this right to their missionaries.[12] The missionary view of life was further strengthened by a humanitarian spirit stemming from the nineteen years' struggle for the abolition of slavery in the English Colonies now brought to a successful termination in 1807.[13]

So in course of time evangelical zeal influenced the British people for a proper appreciation of missionary work and the climax was reached in 1813 when the question of the renewal of the charter of the East India Company came up before the Parliament. The missionaries demanded full permission to preach the Gospel in India and they fought out their case in the pulpit and in the press The controversy raged furiously which in some ways anticipated the agitation of the Anglicists and the Orientalists in India some years later.

The missionary case had already received a setback with the outbreak of the mutiny at Vellore and the numerous pamphlets written by Company's Officers during and after that period of unrest attributing the insurrection to religious causes confirmed the apprehensions of the British people that India might be lost through the zeal and folly of the proselytizing agents of the church of England.[14] In that setting, the letter of Mr. Twining a tea dealer who declared from his own experience that any indulgence shown to the missionaries will spell danger to the British Empire in the East raised issues of serious import, and the missionary case was well-nigh lost when

Sir Henry Montgomery, who had lived long enough in India to know the Hindus, unhesitatingly affirmed that he was more anxious to save the 30,000 of his countrymen in India than to save the souls of all the Hindus by making them Christians.[15] On the missionary side Wilberforce stood at the head of the movement and was assisted by Charles Grant, Claudius Buchanan,[16] Lord Teighnmouth, William Smith and a host of other pro-missionary speakers like Forbes, Whitbread and Pratt. Sati, infanticide, idolatry, religious suicide, the wild scenes connected with Jagannath at Puri and other such things were all urged in favour of the entry of the Christian missionaries into India, and thus the evangelists won the day.[17]

The relevant clause inserted in the Charter of 1813 ran to the effect that it was the duty of this country to promote the introduction of useful knowledge and of religious and moral improvement in India, and that facilities be afforded by law to persons desirous of going to and remaining in India to accomplish these benevolent designs. The Charter also provided for the establishment of an Indian bishopric and three archdeacons, and required a sum of not less than a lakh of rupees to be set apart each year for the improvement of literature and promotion of a knowledge of science.[18] The result was that the episcopal system of the church of England was transferred to India and the missionaries gained a footing and a recognition of their position in India. By 1833 their work had made great progress along with a maturity of their plans for evangelizations and reform.[19]

Missionary work of the Protestant church in Bengal had been of a very intensive nature even at the initial stages. Started by Kiernander and organized by Carey, it bore fruit in the time of Duff and throughout the period, from Kiernander to Duff (1758-1863) missionary enterprise received constant assistance from other evangelists who arrived at intervals like Brown, Buchanan, Martyn and Middleton—great names in the ecclesiastical history of India. The Christian missionary societies and the East India Company functioned in Bengal, undoubtedly enough, as two distinct and separate organizations but a close similarity nevertheless existed in the nature and scope of their work in many a field. A Protestant mission and the Company both secured a footing in Bengal in about the same time, 1757-1758, and both attained the height of their power, one in the field of religious evangelism, and the other in the field of political ascendancy by the middle of the nineteenth century, and both in their own ways became the means of projections of Western ideas and influences in the social and cultural life of Bengal. The post-Mutiny period was a period of consolidation for the British Empire in India and no less for its religious counterpart, the episcopal society of the church of England.

The first Protestant missionary to work in Bengal was Rev. John Kiernander of the Danish mission at Cuddalore who landed in

Calcutta on 29 September 1758. He made Bengal his home and his adopted country and never turned his back on it. But most of his work was confined to Calcutta. Contemporaneously with Kiernander, the Moravian Brethren worked for a space of fifteen years (1777-1792) in Serampore (then called Frederviksnagar). They learnt Bengali, compiled a dictionary, but were not successful in their mission and eventually retired to Tranquebar in 1791.[20] Missionary enterprise in Bengal was strengthened not to a small extent by the sincere exertions of an active and influential circle of Anglicans of Calcutta who stood shoulder to shoulder and laid the real foundation of Christian work in Bengal. Among them, were Charles Grant who rose to a high position in the Civil Service, William Chambers, Master of Chancery in the Supreme Court of Calcutta and his brother Sir Robert Chambers. George Udny, another civilian, and Dr. John Thomas also belonged to this small knot of devoted Christians. This was a period when there was little or no enthusiasm in favour of missionary enterprise. But from 1786 when Rev. David Brown reached Calcutta a succession of distinguished Chaplains (Ministers sent out for the Europeans) of the East India Company continued to arrive at intervals. Rev. Brown of this brilliant constellation of evangelists later became the Provost of the Fort William College and earned a name for his zeal in projecting Christian ideals. Dr. Claudius Buchanan, another of the Chaplains, came to Calcutta in 1797 and later on served in the Fort William College till 1806. His evangelical efforts knew no bounds. He was a patron of the Serampore missionaries and heavily subsidized their activities. But the most distinguished of them was Henry Martyn, the greatest of the Chaplains of the period who landed in Calcutta in 1806. He was a brilliant scholar, adorably spiritual and highly sensitive. But it was impossible for him to understand the Hindus whose idols struck him with horror and whose social organizations appalled him. No less remarkable was the career of Rev. Nathaniel Forsyth who, though not a Chaplain, worked contemporaneously with Buchanan and others Rev. R. May who joined him in 1812 also laboured very usefully but Forsyth was later on obliged to locate himself at Chinsura then a Dutch settlement.[21]

The age of chaplains was now followed by the age of the missionaries in which the Danish settlement of Serampore, a place about 15 miles north of Calcutta, took the lead. When the Baptist Missionary Society was formed in 1792, a Leicester cobbler, William Carey, offered to become its first missionary. Carey landed in Calcutta in 1793 in defiance of the Company's orders and was poorly equipped and badly handicapped to carry on the evangelical mission which he had taken up. But Carey was a man of faith, a faith that could move mountains and subdue kingdoms. His natural talents were great, his intellectual powers were wonderful, and his ability to conquer strange and difficult tongues was almost unique. Unable to do anything in

Calcutta he shifted to Sundarbans where life became a veritable hell for him. At this point he was helped by Mr. Udny, the owner of an indigo factory in the Malda district who appointed Carey as manager of the factory and also gave him permission to preach and convert. Meanwhile four Englishmen inspired by the newly kindled missionary spirit responded to Carey's call but unable to land in Calcutta they repaired to Serampore. Their presence excited the suspicion of the authorities and Lord Wellesley, the Governor-General, demanded the 'surrender of the fugitives in order to deport them to England' but Colonel Bie, the Danish Governor of Serampore, refused to surrender them and the matter was not pursued further. The hostility of the British authorities to organize a mission obliged Carey to migrate to Serampore where he eventually settled in 1799 and built up the famous Serampore Baptist Mission with the help of William Ward and Joshua Marshman, two members of the team who came from England to join him. These three veritable pioneers lived together on the lines of the Moravian brotherhood by throwing all their earnings into a common stock 'each bringing into the mission what he got and receiving what he needed.'[22] The missionary effort of Carey and his colleagues was the embodiment of all that was best in Christian missionary enterprise in India. For over thirty years, Carey laboured with a crusading zeal and a Catholic enthusiasm for Christian evangelism and Western enlightenment.

It is impossible not to be impressed with the record of the work done by the Serampore missionaries. Indian languages were studied in feverish haste and the New Testament was actually printed into 31 Indian languages and dialects. "In no country in the world," says Sherring, "and in no period in the history of Christianity was there ever displayed such an energy in the translation of the sacred scriptures into other tongues."[23] "The millions of people," as Wilberforce reflected, "now got the Bible in their own languages which undoubtedly became the most effective means of propagating the Gospels among all classes of people. The proselytizing spirit received further impetus from occasional tours undertaken by Carey and his associates to distant places which soon developed into an itinerating system inevitable in missionary work.[24] Their direct and evangelistic labours resulted up to 1816 in baptizing about 700 native converts.[25] The more important effect of rendering the Bible into Indian languages was that it led to the development of vernaculars in different parts of India, and Bengali prose in particular saw its birth in the translations and treatises of scholars working under their direction. All this again was made possible because of the printing house that was established through the labours of Ward. That historic machinery was now pressed into the service of evangelism and reform and soon it became a useful institution for the dissemination of learning and knowledge and the whole complex of Western ideas

and influences. The Serampore press was founded in 1818. The first Bengali newspaper called *Samachar Darpan* and an English magazine, *The Friend of India*, during its lifetime of 57 years (1818-1875) became most influential organs of the public life of Bengal.

If Carey and his associates gave the first impulse to the Indian press, they likewise remained pioneers in the field of education in India. The social evils of the country stemming from ignorance and superstition were sought to be liquidated by spreading Christian knowledge. By the year 1818, the mission ran 126 vernacular schools with 10,000 pupils all receiving elementary education and Biblical instructions.[26] Furthermore, in 1821, Carey established the famous Serampore College for the study of English and oriental classics which ranked among the most splendid educational edifices in India. In so doing, he anticipated the work of Dr. Duff who gave a great impetus to westernized education and science. As in education, Carey also remained a pioneer in the field of social reform. The earliest movement against widow-burning was made by Carey who brought the subject before the Bengal Government by carrying out an unofficial census of 'Suttees' occurring within thirty miles of Calcutta.[27]

But the energy of this cobbler-saint, the prince of missionaries, flowed into different channels. Carey took a commanding place in the field of scientific research in an era of varied changes. He founded the Agricultural and Horticultural society of Bengal which soon became one of the most influential societies of India. He and his colleagues also tried their hands in setting up the first steam engine in India and harnessing it to the manufacture of paper on a large scale. Carey also attempted other secular innovations by introducing the system of Savings Banks to counteract the tendency of the people to get into debts.

Besides his Serampore work, which covered a wide field ranging from Christian evangelism to material progress, Carey's Fort William work was no less fruitful of results. Wellesley founded the Fort William College in 1800 to enlighten the oriental world; "to give science, religion and pure morals to Asia." Carey was made the Master and later Professor of the college. The missionaries thought that they could utilize the institution to promote their interest to evangelize India and to produce translations of the scriptures into all the languages from "the borders of the Caspian to the sea of Japan."[28] To Carey, his association with the college gave him an opportunity to embellish his scholarly talents and to give a more mature shape to his philological studies. Apart from the translation of the Bible which was his lifework, he extended the field of oriental studies by the impetus he gave to Sanskrit learning. With the assistance of the Pundits of the college, Carey published a Sanskrit grammar and dictionary, edited the Ramayana and other Sanskrit works.[29] At Fort William College, Carey was the centre of the learned Bengalis

and the encouragement and direction he gave to them made possible the work of early Bengali scholastics like Mrityunjoy, Rajiblochan, Ramram Basu, Golaknath and others.

It is perhaps not possible to form any proper estimate of the achievements of William Carey. In the context of the late 18th and the first two decades of the 19th century his work would appear to be so strange as to baffle all calculations about its results. Carey would have been an incorrigible optimist had he thought that the influences flowing from his manifold work would lead to a revival of Hinduism involving a reappraisal by the Indians themselves of their own theology and a critical review of religious and social practices. Yet in 1834 when Carey died, and a year before, when the last restrictions upon the free entry of missionaries were removed, when evangelism was in progress and numerous reforms were making headway or were already completed, the image of Carey comes out in a clear perspective. His westernized approach to the problems of Bengal, his creative and dynamic schemes of social and educational reform, the evangelical influence he exerted and the noble example of a monkish scholar he set, stirred the stagnant, impassive, unproductive native community of Bengal to its depths. New thoughts on religion, education and social manners had entered the minds of many and "Like good seeds sown in good ground were showing signs of coming to fruit."[30] In that view of things William Carey stands as the foremost leader of renascent Bengal. He was a pathfinder in the real sense of the term not only to the missionaries who followed him later by showing them the area and object of their work, but also to the Company's Government in India and to its people because he was the first to turn the wheel of reform and progress before either the Company or the people had dared to approach the problem or felt seriously about the moral stagnation of the country.

It has been seen that the year 1813 was a turning point in the history of Christian missions in Bengal. The removal of the missionary clause was followed by an influx of missionaries to India both from England as well as from America. A change also took place in the mode of missionary work. While emphasis was laid on formal conversion in early times the new Protestant missions were more concerned with the spreading of Christian knowledge. Street preachings, circulation of the Bible and pamphlets and active humanitarian work were given priority in their programme than actual baptism. In other spheres the new leaven was at work: if the European society had already changed for the better, the native community was also reacting to Western ideals and showing signs of life.

Quite in accordance with the permissive clause of 1813, Thomas Fanshaw Middleton (1814-1822), a distinguished Greek scholar, was appointed the first English Bishop of Calcutta, Bishop Middleton

organized the Calcutta Diocesan Committee and formed the excellent design of founding a Missionary College where the Indian Christians could be trained as preachers and teachers and the work of translating the scriptures could be undertaken. The college situated on the banks of the Bhagirathi could not however be completed during the lifetime of Middleton. Reginald Heber, who succeeded him as Principal in 1823, was a distinguished student of Oxford and had a place among English poets. His famous Indian Journal gives an excellent account of the state of the country at that time. Among his successors mention may be made of Bishop Wilson who built the Calcutta Cathedral and Bishop Cotton who imbibed the spirit of Dr. Arnold. But Bishop's college had difficult times owing to its inconvenient situation and later on it was shifted to Calcutta in 1880 under Rev. H. Whitehead.

When the men of Serampore separated from the Baptist Missionary Society in 1816, a new society, the General Baptist Missionary Society, was founded in the same year. The new society continued the work of the Serampore missionaries. The Bengali translation of the Bible of Carey was vastly improved by Dr. Yates, while Dr. Wenger took charge of the Sanskrit version. In 1893 there were connected with the Baptist Mission 35 missionaries, 3,991 church members, 11,056 Christians and 3,702 children at school.

The activities of other missions were no less encouraging. The London Missionary Society, founded in 1795, was first established at Chinsura in 1798 with Rev. N. Forsyth as its first missionary. He was succeeded by Rev. May who took up education as the field of his operation. By 1815 he had 20 schools with 1,651 students of whom some were Brahmins. The number of schools increased later on. This scheme of education was highly approved by Gordon Forbes, the commissioner of Chinsura and by Marquis of Hasting who even sanctioned a monthly grant of Rs. 600 for the Missionary schools.[31] Rev. May was soon joined by Rev. J. D. Pearson. In 1816 the society, however, transferred its headquarters to Calcutta where they erected a building in the Dharmatala Street, called the Union Chapel,[32] mainly in the interest of the English dissenters.

In the extensive work of evangelization in Calcutta and its neighbourhood which was receiving the attention of various missionary bodies, the Society for the Propagation of the Gospel took a prominent part. The society, which was in existence for over a century. took charge of the Bishop's College in 1820 and also of other schools made over to them in 1828 by the Society for Promoting Christian Knowledge which withdrew from missionary work altogether in 1825. The Gospel Society soon sprang into the front rank of missionary societies then labouring in Calcutta. The first missionary sent by this society, Rev. W. Morton, reached Chinsura in 1829.

These missionary societies engaged themselves in many types of

activity from pure evangelism to educational and medical work. Down to 1830 they were wholly occupied with proselytizing activities. But a change came over in the post-mutiny period when old hazards were gone and missionary work became free from handicaps and other difficulties experienced in the early period. The missionaries now addressed themselves to all sorts of philanthropic activity in the form of hospitals and medical work, of famine relief and rural uplift and industrial welfare. Another very important feature of missionary work in this period was the strenuous effort made to bring education within the reach of native girls and women. By founding schools and by arranging local meetings in private houses women workers of the different missions came into contact with the ladies behind the *purdah* and sought to improve their approach and broaden their outlook. Apart from individual societies, many female members of these organizations became pioneers in this field of work. During the same period there was a great tendency to focus missionary work on the so-called aborigines, the name given to the whole of the tribes of Western Bengal and the Central Provinces. The post-mutiny period was also marked by a phenomenal expansion of missionary organizations in the nook and corner of Bengal.

In the analysis one makes of the results of missionary work it will have to be remembered that Christianity which moulded and fostered many of the social and political traditions of the West, came to Bengal under various guises and through many channels, not the least through the work of countless Christians either foreign or Indian who in their personal capacities brought the people into contact with Christian values and ideals. It is not the object of the present article to trace the development of the Christian community in Bengal and of the personal contribution of individual Christians, to the progressive movements of India in the social and political sectors. It is mainly concerned with the impact of the work of the professional missionaries, especially in the Hooghly district, whose main object was religious evangelism.

Yet it cannot be denied that the very presence of the missionaries produced influences in favour of the Western outlook and in the early stages of British rule in India in particular the missionaries stood for the whole complex of Christian *Weltanschauung* and were. therefore, regarded as apostles not only of Christian religion but in general of Western culture as well. The missionaries of the different evangelical societies thus formed an important channel for the transmission of Western values and Western knowledge and if the Bengali intellectuals had assiduously cultivated and assimilated ideologies and principles of the West in the years 1830-1860 before the rise of Hindu revivalism and Indian nationalism, it was not to a small extent due to the impact of Christian thought and culture originating from missionary enterprise.

It is not urged that the missionaries changed Indian society or that the movement in the direction of progress and reform in 19th century Bengal was the direct result of Christian influence; yet, it cannot be denied that the Renaissance of that age could not have been possible without the contact Bengal established with the West through the medium of the Christian missionaries. The missionaries undoubtedly exercised great influence both positive and negative towards the making of new India but it is nevertheless objectively difficult to estimate the nature and importance of that influence on the emergence of renascent Bengal. If the missionary writers had exaggerated the value of evangelical activities in the past, Indian writers have shown a tendency to minimize it. The extent of the success or failure of Christian baptisms cannot of course be exactly measured but the same is not true of the schemes of social reform which stemmed directly from the proselytization activities of the missionaries, of teaching and converting people.

Conversion is not the field where the missionaries attained any very great success. Conversion came largely from among the lowest castes who were attracted less by the Gospel and more by the prospects of material and social advance. Quantitatively, the number of the converts was very small even though missionary efforts were successful among the backward tribes, and qualitatively also, the converts to Christianity from educated classes were fewer still. But the effect of missionary work was undoubtedly felt particularly in the field of social development where its influence worked in various ways. Yet nationalist impulses of renascent Bengal have tended to ignore or obscure this aspect of the question by linking up the whole history of social progress to the sophisticated ideology of the Brahmo Samaj. The movement of the Brahmo Samaj was however not an isolated phenomenon in the 19th century history of Bengal. it was admittedly thoroughly 'suffused' with Christianity. Moreover, missionary enterprise in India was older than any of the indigenous experiments at West-orientated social values and principles.[33]

The fact is that the missionaries constituted an overt challenge to Hinduism. Never before was the Hindu ideal of life, its whole apparatus of social organization subjected to such ruthless criticism as was done by the missionaries. The vast missionary literature in India which is mostly full of invectives against Hindu religion is an evidence of the highest value regarding the attitudes of the Christian proselytizers towards this country.[34] The challenge became all the more fundamental and also intellectual because Christianity unlike Islam relied upon monastic agencies and not upon military agencies in its evangelical missions thus leaving the people chance to react in their own way. The contemporary literature of Bengal, particularly newspapers of that time, will bear eloquent testimony to the intense reaction that followed the introduction of Christianity. The civilization

and religion of the West were assailing every phase of heathenism, its idolatry, its mythology, its castes and other absurdities and everything relating to Hinduism was subjected to a scathing criticism and a merciless exposure.[35] Debates, discussions and lectures on Christian theology and religion became the most usual feature of the public life of Bengal, the whole class of educated gentry was in ferment.[36] These signs of mental agitation were significant of the deep impression the Christian ideals had made on native society. The impact was felt everywhere as the influence of Christian ethics and education tended to stimulate the intellectual and moral sense of the people. The relatively rational system of human society and a purer principle of human conduct which the missionaries represented proved to be no less attractive. In this way Protestant missions in Bengal have been for the most part efficient agencies in the great work of general awakening and liberalizing the minds of the educated classes from the shackles of the past.

This being the situation, it will not, therefore, appear unlikely that the missionaries provided the first impulse towards social reform. It may not be nearly correct to form any proper estimate of the results of the activities of the missionaries at any stage of their progress but this has to be admitted that at a time when both the government and the people were either allergic or apathetic to social reform these foreign agencies focussed the supreme need of social changes and pressed the demand for a policy of reform so forcefully that it became ultimately necessary for the Government of India not only to appreciate the attitude of the missionaries but also to intervene and participate more extensively in the scheme of social reform.

But at no stage in the progress of these social innovations was there any tendency to rely exclusively on missionary agencies and the increasingly important part played by the Bengalis themselves in the new reforming movements since the thirties of the last century reduced to insignificance the external promptings of reforming zeal of renascent Bengal, so much so, that in the eventful execution of the series of reforms of the 19th century, the evangelical fervour in which they were couched gradually receded to the background and indigenous theories and methods remained to impart a spirit of individuality to these social reforms. It will thus appear that the missionaries were an external force in the life of Bengal and it is precisely in that position, midway between the government and the people, that they were able to use their influence with both for the furtherance of their evangelical places and humanitarian objectives.[37]

The secular activities of the missionaries are often lost sight of owing to the religious character of their missions. Their share in the improvement of the social condition of the peasantry of Bengal was not inconsiderable. They took up the cause of the peasantry

who were suffering from many forms of oppression and discussed these matters in the missionary conferences frequently held. These were dealt with in the petition submitted to parliament in 1882, in their farewell address to Lord Dalhousie in 1856 and in their memorial to the Lieutenant-Governor in the same year. In 1856 they even asked for a special inquiry on agrarian matters which was refused. They again submitted a petition to parliament in 1857 and another to the Legislative Council pertaining to the Rent and Sale Bills. In the memorial submitted to the Lieutenant-Governor in 1861, they advocated the same cause. But by the Rent and Sale laws several important defects which they had pointed out in matters of land tenure and the direct oppression of the landholders were set right.

The missionaries also stood by the side of the aboriginals and other unsophisticated elements to save them from falling a prey to the exploitation of the moneyed classes, revenue farmers and land-grabbers. They sympathized with the Santals in their hour of distress and firmly protested against the forced system of indigo planting. When Rev. James Long was prosecuted by the Indigo Planters' Association for translating *Nil Darpan* into English, the missionaries came forward to help him. The tone of the planters' press of that time and the arguments of the prosecuting counsel left no one in doubt that both the government and the European planters and businessmen very much resented the interference of the missionaries in these social questions. Long's case was a stern warning to the missionaries not to espouse the cause of the social destitutes. Yet to the peasants left alone by the government, the people and the landed classes, the missionaries of Bengal remained devoted to give them protection and safeguard their rights.[38]

The attitude of the missionaries towards Indian religions was, however, one of uncompromising hostility. They were neither very scrupulous in regard to their proselytizing methods nor restrained in their denunciation of Hindu religion. Even a great educationist of the eminence of Dr. Duff shared to a large degree the prevailing prejudices of the time and assailed Hinduism as a false religion "a perverse product of the ingenuity of fallen men."[39] No doubt Bishop Heber and others have recorded their appreciation of Hindu institutions[40] but in general the missionaries of Bengal steadily pursued an anti-Hindu policy. A justification of this attitude, however, rests on the fact that the main object of the missionaries being evangelization they could not remain uncritical of the Hindu religion and the social system which it represented. It was further urged that the progress of the Christian mission itself depended on the extent to which the indigenous institutions could be undermined by slanderous and scurrilous attack.[41]

This policy naturally created ill-feeling between the people and the missionaries, though it does not agree with the general situation

because the educated gentry on the whole looked with favour upon the English community and the evangelists and did not apparently connect the latter closely with the Company's government despite their European origins. The fact that the missionaries were not widely supported by the government also tended to neutralize an attitude of direct hostility towards them. Nevertheless the missionaries were foreigners and it was obvious that they could not fail to gain some prestige from their personal and social connexions with the society of the ruling classes.

All these may account for the unsympathetic attitude of the general public of Bengal towards the missionaries and most of the elites of that time including Raja Rammohan Roy, who was not otherwise disrespectful to Carey and Duff, had not much opinion about the 'body of English gentlemen' going out of their way to convert the Hindus. The great Raja reflects: "It is true that the apostles of Jesus Christ used to preach the superiority of the Christian religion to the natives of different countries but we must recollect that they were not the rulers of those countries where they preached. Were the missionaries likewise to preach the Gospel and distribute books in countries not conquered by the English such as Turkey, Persia, etc. which are much nearer England, they would be esteemed a body of men truly zealous in propagating religion and in following the example of the founders of Christianity. In Bengal, where the English are the sole rulers, and where the mere name of Englishmen is sufficient to frighten people, an encroachment upon the rights of her poor, timid and humble inhabitants and upon their religion, cannot be viewed in the eyes of God or the public as a justifiable act."[43] Even the great English philanthropist David Hare felt distressed like Rammohan Roy and Radhakanta Deb at the Christian missionaries' policy of gaining converts in educational institutions. David Hare's hostility to the Gospel had alienated the Christians to such an extent that on his death, he was not given a burial in a Christian cemetery. But it was Debendranath Tagore who gave the most articulate expression to the anti-missionary feelings of renascent Bengal. His aversion for the proselytization activities of the Christian missionaries came from the realization of the fact that the Christian evangelists were undermining the Hindu religion and society. This drove him to the necessity of establishing some such institutions which would counteract this tendency. Thus the *Tatwabodhini Sabha* which he founded steadily worked in the direction of driving home to the Hindu youths the richness of their culture and the greatness of their religion. In course of time it became a powerful forum for both the progressives and the conservatives and a great force to combat the activities of the Christian missionaries. Many other elites of Bengal of that time were unbending opponents of the missionaries and considered it to be a patriotic duty to wean away the

impressionable young men of Bengal from the influence of the Christian evangelists. They were, to refer to only a few of the farsighted leaders of the 19th century Bengal, Prasanna Coomer Tagore (1801-1868), Tarachand Chakravarti (1804-1855), Rasik Krishna Mullick (1810-1858), Motilal Seal, Girish Chandra Ghose and others. To counteract the influence of the free missionary schools which tended to become a fertile ground for conversion, the Hindu Charitable Institution was founded in 1849 mainly through the labours of the leaders named above which effectively checkmated conversion of the natives to Christianity.

The attitude of the native Christians of Bengal was one of pliant compliance with the dictates of the faith and there was hardly any sense of uneasiness on account of the imposition of an alien culture. This was because the converts came mostly from the lower classes and the aboriginals who were attracted more by the prospect of improving their social status and financial position than by the teachings of Jesus Christ. But the intellectual classes of Bengal who were admitted to the Christian Church possibly reacted differently. While appreciating very much the services of the European missionaries who came to the country and preached the blessed Gospel, they could not help feeling a sense of resentment at the tutelage of the missionaries and their interference and direction at every stage of their religious life. Not that they wanted to throw off the missionary yoke but it would not appear unlikely if they complained that they did not feel any sense of participation in ecclesiastical matters, that instead of being self-reliant in their religious life they were being guided by the missionaries at every step.

This point was stressed further by Rev. Lal Behari De, the famous Bengali Christian and a great writer who made out a case for the establishment of the United National Church in Bengal on the ground that European Christianity appeared to be too exotic, too alien in Bengal as it was modified by European modes of thought and feeling. The ecclesiastical polity was also purely European taking its colour and complexion from Rome and Geneva which led to the establishment of native churches on European models. This apparently was not liked by the intellectual Christians of Bengal who felt that they were not bound to accept the dicta of an Augustine or Aquinas or Calvin. Lal Behari De in particular was convinced that the native churches were like so many 'forcing gardens' and commented: "But it is not difficult to see that native Christianity cannot develop itself under such artificial and foreign forms. . . . If you wish to see Bengali Christianity develop itself freely and naturally, you must free it from its European trammels; you must remove it from the hot-house of European Church organisation and plant it in the genial soil of Bengali modes of thought and feeling; or in other words you must make Christianity indigenous in Bengal."[43]

The overtone of a national sentiment as reflected in the above statement cannot be missed. Lal Behari De was the foremost of those nationalist Christians who showed that it was possible to love one's country, his spiritual subjugation to Christianity notwithstanding. Madhusudan's famous 'Ode to Motherland' and Rev. K. M. Banerjee's herculean work on the Mahabharata reflect the same attitude of the devout love of a Bengali Christian for the cultural heritage of his country.

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[1] Weitbrecht—Missionary Sketches in North India. London, 1858. p. 2 ff.

[2] G. Gogerly—The Pioneers: A Narrative of Facts Connected with the Early Christian Missions in Bengal. London, no date. pp. 1-2, 5, 11, 14.

[3] See Terry quoted in P. Thomas—Christians and Christianity in India and Pakistan. London, 1954. p. 152.

[4] Hugh Murray in his History of British India gives an authentic account of the outrages committed by the Christian traders, and what is significant, adverts to the fact that actually a mission was sent out to India "to put an end to the exactions of presents by British officials who had enriched themselves at the expense of native princes." (Vol. I. pp. 277-82). This view is fully endorsed by a missionary writer Rev. Hollis Read who places the 'Mutiny' of 1857 as a nemesis of British rule in India and quotes copiously from many known authorities to bear testimony to the oppressions committed by the officers of the Company which justified missionary interference if only to rectify the moral tone of the early Christian rulers. (India and its People. London, 1858. pp. 43-60).

[5] J. Richter—History of Missions in India (Transl.). Edinburgh, 1908 p. 129.

[6] P. Thomas—Christians and Christianity in India and Pakistan. London, 1954. p. 170.

[7] Weitbrecht—Missionary Sketches in North Ind a. London, 1958. pp. 5-6.

[8] ibid. p. 24.

[9] Rev. J. Chamberlain, a Baptist missionary was expelled from India on account of preaching at Hardwar. The opinion was general even amongst enlightened British officials in the country that there could be no more dangerous means of estranging of the hearts of the people from the Government than by attempts to meddle with the religious concerns of the Hindus. Furthermore, the missionaries were forbidden under threat of grave consequences not to speak to the sepoys about religion under any circumstances whatsoever. (Richter—op. cit. pp. 131-32).

[10] Weitbrecht—op. cit. p. 29.

[11] Richter—op. cit. p. 149.

[12] For a more forceful argument of the missionaries, see Weitbrecht—op. cit. p. 29 as follows: "There was no instance in history of a people governing a conquered nation by adjuring its own religion, at least the history of the Tartars, the Mahomedans, the Portuguese, the Spanish, the French and the Dutch would not support this principle though this principle itself may not be wholly defensible."

[13] K. Ingham—Reformers in India. pp. 10-11.

[14] For a bitter criticism of the responsibility of the missionaries for the Vellore outbreak see Major Scot Waring—Observations on the present state of the East India Company etc. London, 1808. p. xi f.

[15] See P. Thomas—op. cit. p. 176 ff, for a full discussion of all these proceedings and for that famous statement of Mr. Marsh, a lawyer of Madras, who was so eloquent of the Hindu faith. p. 179.

[16] The religious views and anti-Indian attitudes of the missionaries have been subjected to severe criticism by Major Scot Waring as noted above. Though not free from prejudice, his opinions are valuable from the point of view of a contemporary observer. His estimate of the work of Claudius Buchanan is both informative and critical.

[17] For a critical analysis of the attitudes of the various religious groups and Parliamentary parties on this issue, see Ingham—op. cit. pp. 11-12.

[18] Richter—op. cit. pp. 151-52.

[19] The removal of the missionary clause was but the first round of the struggle. The Christian Knowledge Society was particularly vehement in its denunciation of the Company's association with Hindu temples and idolatry and all these features including the pilgrim taxes were later on discarded. (Thomas—op. cit. p. 182; Richter—op. cit. pp. 189-90).

[20] Richter—op. cit. p. 131.

[21] Richter—op. cit. p. 145.

[22] For an account of the daily routine of the missionaries, see Sherring—op. cit. p. 62

[23] Sherring—op. cit. p. 75.

[24] For the routine work of the missionaries, see Sherring—op. cit. p. 62.

[25] ibid. p. 76.

[26] Thomas—op. cit. pp. 166-67; Sherring—op. cit. p. 76.

[27] E. Thompson and G. T. Garrat—Rise and Fulfilment of British Rule in India. London, 1935. p. 327.

[28] Weitbrecht—op. cit. pp. 30-31.

[29] Sherring—op. cit. p. 64.

[30] ibid. p. 89.

[31] ibid. p. 81.

[32] See a short pamphlet by Rev. W. G. Brockway: Union Chapel—Past and Present. Calcutta, 1894.

[33] K. Ingham—Reformers in India. p. 1.

[34] See K. A. Ballhatchet--Some Aspects of Historical Writings on India by Protestant Christian Missionaries during the Nineteenth and Twentieth centuries. in Historians of India, Pakistan and Ceylon--ed. by C. H. Philips, p. 344 ff. See also views of Duff quoted in British Paramountcy and Indian Renaissance. Vol. X, Pt. II. p. 155.

[35] Sherring--op. cit. p. 96.

[36] For the views of Raja Rammohan Roy, see Works of Rammohan Roy. pp. 145-46, quoted in British Paramountcy and Indian Renaissance. Vol. X, Pt. II. pp. 15-16.

[37] Ingham—op. cit. pp. 122-23.

[38] Joseph Mullens--A Brief Review of Ten Years' Missionary Labour in India between 1852 and 1861. pp. 172-73.

[39] A. Duff--India and Indian Missions.

[40] Weitbrecht--op. cit p. 73. cf. also the statement of the Madras lawyer, Mr. Marsh, quoted in Thomas—op. cit. p. 129 Ballhatchet has also drawn attention to the pro-Hindu attitude of some of the missionary writers. (C. H. Philips—Historians of India, Pakistan and Ceylon. pp 345 ff).

[41] Ingham—op. cit. p. 4.

[42] Quoted in British Paramountcy and Indian Renaissance (ed. by Dr. R. C. Majumdar). Vol X, Part II. p. 16.

[43] The Desirableness and Practicability of Organizing a National Church in Bengal: A lecture delivered at the Bengal Christian Association on Monday, the 13th December. 1869 by the Rev. Lal Behari Dey. Calcutta, 1879.

APPENDIX—C

THE PORTUGUESE AND THE DUTCH AT HUGLI*

BY

TAPAN RAYCHAUDHURI

The beginnings of the Portuguese connexion with the Hugli district goes back to 1535. Martim Affonso de Mello, a Portuguese captain, was sent to Bengal by governor Nuno da Cunha in 1533 with the object of opening trade. Mahmud Shah III, the then Sultan of Bengal, annoyed by some fresh evidence of Portuguese piratical activities, captured de Mello and held him prisoner. Diogo Revello, factor of the Coromandel pearl fisheries, sent to explore means for de Mello's release, visited Satgaon in 1535. Revello's success, however, went much beyond this limited aim. The Sultan, threatened by the famous Sher Shah, sought the help of the Portuguese and as a reward for their assistance, granted them *inter alia* the right to build a factory at Satgaon and made over the port's custom house to captain João Correa. Besides, soon after his arrival, Revello had taken an important step in line with the Portuguese policy of monopolistic trade, enforced by their superior naval power: two merchant ships from Cambay were forced to go back under threat of capture The first Portuguese settlement at Satgaon—known as the Porto Pequeno (small port) by 1554,—a name later applied to Hugli,—was established under de Mello's leadership, probably around 1537-38. Sher Shah's victory and the consequent loss of patronage appears to have adversely affected the growth of this settlement. If Manrique, who was in Bengal around 1528-29, is to be believed, until the establishment of their settlement at Hugli in 1579-80, the Portuguese first came from Goa and traded in Bengal only during the monsoons, and later extended their stay to a year or two. When they returned to Goa, they left behind substantial amounts of merchandise with the local traders. Apparently, the sale proceeds were collected when they visited Bengal again the following year. Abdul Hamid Lahori, writing in Shahjahan's reign, however, traces the origin of a settlement at Hugli to some Portuguese traders from Sondip in the

*The section relating to the Dutch is based for the most part on "The Dutch East India Company and the Economy of Bengal, 1650-1717" (unpublished Ph. D. Thesis) by Mr. Om Prakash of the Delhi School of Economics, who very kindly permitted me to incorporate in this paper some of the results of his researches into the Dutch records preserved at the Algemeen Rijksarchief, The Hague.

pre-Mughal days. He mentions the erection of fortified buildings and the growth of a port visited by European ships. In any case, the luxury products brought by the Portuguese from Borneo, Malacca etc. aroused Akbar's interest and it was at the Emperor's instance that Captain Pedro Tavares, *Partab Bar Feringi* of the *Ain-i-Akbari*, visited him at Agra. The result of this mission was an imperial *farman* permitting Tavares to build a city in Bengal. The settlement at Hugli was now definitely established if it was not there already. By the time the *Ain* was written, both Satgaon and Hugli, the two ports on the river, were in the possession of the Portuguese. They, however, deliberately sought to divert the trade from Satgaon to Hugli, which was apparently under their exclusive commercial control, and was helped in this effort by the silting up of the river Saraswati. When Abdul Hamid Lahori talks of the decline of Satgaon resulting from the growth of Hugli, it is not quite clear whether he is talking of the pre-1580 period or not. The total eclipse of Satgaon probably took place in the early years of the 17th century,—some years after the *Ain* was written.

The Portuguese possessions around Hugli came to include besides Satgaon, villages on both sides of the river,—as far as 60 leagues inland according to Fr. Cabral,—from which they collected revenue. The settlement, ceasing to pay the nominal tribute to the Emperor after a while, and only formally subject to the control of the Goa Viceroy, became autonomous for all practical purposes. Though "highway robbers and men of loose lives" were welcomed by Pedro Tavares to his new settlement, the statement that the Portuguese of Bengal were "without Forts and Government, every man living after his own lust" was more true of their colony at Dianga than of Hugli. An annually elected *capitan convidor*, assisted by subordinate captains, administered the city and, despite occasional overtones of violence, the tempo of life there was generally peaceful enough to permit of brisk commercial activity.

Some idea of the magnitude of this trade may be formed from the fact that *sair* duties collected from the port came to 100,000 *tangas*. Before the establishment of Hugli, the Portuguese ships sailed up to Betor (near Sibpur) where temporary marts were set up to supply the staples of export. The smaller ships sailed up to Satgaon where, according to Cesar Federici, writing in 1567, "they laid thirtie or five and thirtie ships great and small, with Rice, cloth of Bombast of diverse sorts, Lacca, great abundance of sugar, Myrobalans dried and preserved, long Pepper, Oyle of Zerzeline, and many other sorts of merchandise." Besides these items, Manrique mentions among the commodities exported by the Portuguese from this region *ginghams* or grass—cloth, silk, rich back-stitched quilts, bed-hangings, saltpetre, wax, indigo and various curios. Dresses, textiles and delicatessen produced in the settlement also came to be included

in the exports. The commodities so exported were sold mainly in the markets of Malacca, the East Indies, Burma and the Portuguese colonies in India. Rice and the food-stuffs were exported especially to the Portuguese territories in Ceylon and the West Coast of India. Bengal textiles also reached the markets of Europe through Portugal and the Portuguese settlements in the Province had trade contacts even with Macao.

The bulk of the commodities which the Portuguese sold at very high profits at Hugli were luxury products from the East Indies. These included red and white sandal-wood from Solor and Timor, clove, nutmeg and mace from Malacca and Banda, camphor from Borneo etc. Besides, quantities of porcelain and lacquer-work from China, Burmese jewels, minerals, silk goods from South India (?), cowries from the Maldives, conch-shells from the Tinnevelly coast, pepper from Malabar and cinnamon from Ceylon were also included in the imports. The last two items were monopolies of the Portuguese king and as such had to be smuggled into Hugli. One curious fact about the Portuguese imports into Bengal is that the available sources do not refer anywhere to bullion known to be by far the most important item of import into the region. It is difficult to believe that the Portuguese did not import this item. A more likely explanation is that perhaps the sources do not mention it because bullion was not considered a commodity.

The trade of Hugli under the Portuguese was carried on by several agencies. Ships from Portuguese India, Negapatam, Sumatra, Malacca, the East Indies and even regions further East as far as Macao came regularly to Hugli. In accordance with the monopolistic policy of the Portuguese, a large proportion of such ships were no doubt owned by them. The Hugli Portuguese in their turn went out on regular trading voyages to Burma, the Indies and the Portuguese possessions on the West Coast of India. The 'passport' system, introduced by them into Bengal quite early in their career, meant that Indian shipping was not totally excluded from the Bay and the Indian Ocean. But Asian participation in the trade of Hugli was confined mainly to the overland trade. The river port was regularly visited by Hindustani, Mughal, Persian and Armenian traders. Though the overland trade was mainly in Asian hands, the Portuguese had made some headway even here. They went as far as Patna with commodities manufactured in Bengal or imported there and procured in return "course carpets of Junapoore, ambertyes, cassaes and some silke."

The Mughal attack on Hugli in 1632 contributed powerfully to the decline of the Portuguese in Bengal. Their trade, however, was in any case foredoomed by the growing competition from the Dutch and the English companies as also the general decay of the Portuguese power. There are several versions of the circumstances which led

to the attack of 1632. The contemporary Portuguese writers, including Fr. Cabral who was at Hugli during the siege and one of the few who managed to escape, stress Shahjahan's displeasure at the refusal of Hugli to help him during his rebellion against his father as the main reason. Manrique emphasizes an incident involving the capture of a high-born Mughal lady by a Portuguese from Chittagaong. The *Pādshahnāmā* offers a less subjective explanation, namely the growing apprehension of the Mughals at the power of the Hugli Portuguese and resentment at the assumption of extra-territorial powers, including the exaction of custom duties and the fortification of the buildings. Whatever the reason for the emperor's wrath, Hugli was attacked by land and river and, after a siege lasting three months, fell in the last week of September, 1632.[1]

The prisoners from Hugli who were taken to Agra, however, found great favour with the Emperor for some unknown reason. In July 1633, they returned to Bengal with a *farman* granting them 777 *bighas* of rent-free land, independent of the authroity of the *subahdars*, and conceding a number of religious and commercial privileges. This *farman* led to the foundation of the third Portuguese settlement in the region,—at Bandel. In 1641, Prince Shuja, as governor of Bengal, confirmed the *farman*. The new settlement flourished and even the trade of the English and the Dutch does not appear to have completely ruined its trade. In 1669-1679, Bowrey saw some 10,000 Portuguese there as also many Portuguese ships visiting the port.[2] It is only in the 18th century that their trade became altogether insignificant.

The Dutch interest in Bengal dates back to the earliest days of their trade relations with India. Their attempts to establish contact were, however, repeatedly frustrated, partly through the active hostility of the Hugli Portuguese. Following the latter's expulsion from Hugli, the prospects improved for the Dutch and between 1635 and 1642, four *farmans* were procured from the Emperor Shahjahan granting them trading rights in Bengal. In a province as far away from the capital as Bengal, imperial orders were not always obeyed, and the resistance of the local Muslim merchants, including some of the top officials, rendered the 1635 *farman* totally infructuous. The small factory established in 1636 at Hugli--by chief factor Jacob Mahuisen from Coromandel—was destroyed by the local *faujdar* in August that year and several of the Company's employees were sent as prisoners to Dacca. The position improved somewhat after an agreement was concluded with the *subahdar*, Islam Khan, in September 1636. According to this treaty, duties of Rs. 3,000, Rs. 2,500 and Rs. 1,200 respectively were to be paid by big, medium-sized and small ships entering Hugli in addition to inland tolls on goods going out of or into Hugli. Besides, the export of saltpetre, gunpowder and slaves were prohibited. Though the 'vexations' to

which the Company was subject continued from time to time, their trade in Bengal, under their Coromandel directorate, prospered, and in 1655, in view of their growing importance the Bengal factories were created into a separate directorate under the direct control of Batavia. As Hugli was the chief trading centre of Bengal "where the loading and unloading of the ships had to be done in any case," the chief factory was transferred to this river port the following year. The villages of Chinsura, Baranagor (?) and Bazar Mirzapur were given in lease to the Dutch on an annual ground rent of Rs. 1,574. Soon afterwards, the trade of Bengal was disrupted briefly but effectively by the wars of succession and the new *farman* secured from Aurangzeb in 1662 promised guarantees against the seizure of the Company's ships and confirmed the old rate of transit duties which appears to have been fixed at 4% 'once-over payment' at Hugli sometime earlier. This meant exemption from duties on goods bought and sold within Hugli, the duty being levied only when the goods entered or left the port. This privilege permitted the growth of an organized system of fraud. The passes or *dastaks* granted by the Hugli or other factories to the boats carrying the Company's goods and the *talikas* specifying in detail the quantity and value of the same were the basis on which the tolls were fixed, apparently with little or no physical check. In any case, there was no check on the values stated and the Bengal factories secured, in 1672, from Batavia a secret permission to defraud the Bengal government of 25% of the Hugli toll. This object was attained partly by issuing *dastaks* to the Indian merchants dealing with the Dutch. Between 1656 and 1672, according to the Company's calculations, the government had been cheated to the extent of Rs. 92,700. Ray Nand Lal, the *diwan*, however, estimated the amount to have been between Rs. 7,00,000 and Rs. 8,00,000. On the other hand, the exemption from the payment of transit duties, guaranteed by the *farman* of 1662, often remained a dead letter and the cost of presents to and exactions by the officials, not stipulated in any agreement, accounted for a fair proportion of the Company's total expenditure. As against this, sometime in the 1650's they had secured from the local *faujdar* an exemption from the anchor-charge of Rs. 400 per ship.

The relations between the Dutch factory at Hugli and the local authorities often acquired the character of a see-saw struggle. The frequent demands for naval assistance were a major source of trouble. In the 1650's, for instance, the Dutch refusal to help Shuja in his projected Arakan campaign led to the imposition of a 20% duty on all imports and exports and to threats of expulsion. The naval power of the Dutch and the fear of reprisal on the high seas was, however, an ultimate guarantee against such punitive actions. Occasionally, the Dutch at Hugli did come to the aid of the local authorities. In 1677, they helped the *faujdar* of Hugli, to crush the

rebel zamindars on the coast of Orissa. Again, in 1695, the rebel Shova Singh was forced to vacate the Hugli fort when two Dutch ships bombarded its ramparts. In the Company's own interest, their soldiers fought the rebel army in land campaigns as well. Over-confident of their power, the Dutch were at times too easily inclined to take the law into their own hands. In 1672, the widow of one Bolleram [Balaram (?) Bholaram (?)], the keeper of the Company's toll accounts, committed suicide on being tortured by the Hugli factors for the extraction of information regarding hidden assets. On hearing of this incident from the local *faujdar*, the governor Shaista Khan prohibited all trading with the Dutch, imposed a heavy fine and seized the Company's toll accounts. The fine was eventually reduced through the good offices of Ray Nand Lal, won over by a bride, and the Company permitted to trade again on payment of the fine. Subsequent attempts to get back the amount thus paid proved to be futile and the Company decided that henceforward toll accounts should not be maintained by the Indian employees. At times, the sins of their compatriots and fellow-Europeans were visited on their heads. In 1698, following on the piratical activities of the notorious Captain Kidd and the Dutch pirate Chivers, the Europeans were prohibited from doing any trade at Surat—an order which had repurcussions in other parts of the empire as well. Hardly had these troubles ended, when there were fresh attacks on Indian ships, leading to fresh prohibitory orders in November 1701. The orders were rescinded at the instance of Murshid Quli Khan, the then *diwan* of Bengal, who demanded a *nazrana* before the Europeans were allowed to resume their trade The Dutch managed to evade the payment and the prohibitory order was effectively withdrawn in April 1703. Trade was carried on clandestinely during the period when the prohibition was in force. This, however, meant that the goods normally procured at Patna and Kasimbazar—where the prohibitory orders were strictly enforced—had to be procured at Hugli at prices which were 22% to 161% higher than the usual rates. Similar prohibitory orders, following on acts of piracy, issued in 1703, did not affect the Hugli factory directly. The position of the Dutch improved with Murshid Quli's confirmation of the 1662 *farman* in 1704 and the grant of a fresh *farman* by the Emperor Shah Alam in 1710 which *inter alia* reduced the Hugli toll from 4% to 2½%. The Katelaar embassy secured a fresh *farman* in 1712 from Jahandar Shah continuing the lease of Chinsura, Baranagor and Bazar Mirzapur, stipulating that the Company's bullion would be given priority in the royal mints and confirming the old *farmans*.

As early as 1650, the English had secured a privilege which gave them an immense advantage vis-a-vis their chief rivals, the Dutch. The *farman* granting exemption from transit duties on goods to be brought to Surat was extended to Bengal by a *nishan* from Prince

Shuja. Eventually, they had to pay a tribute of Rs. 3,000 per annum which was equal to "a rather small fraction of the 4% toll that the Dutch had to pay." Farrukh-siyar's *farman* of 1717, 'the Magna Carta of the Company's trade in India,' reinforced and extended these privileges. Yet, surely until that year, and probably for some more years, the Dutch exports from Bengal were substantially larger than those of the English, though the latter were steadily gaining ground. The Dutch position was further weakened by a series of political *faux pas*. They had helped the partisans of Nawab Sarafraz Khan both before and after Alivardi's accession and even "leaned over to the Marathas when they made their incursions into Bengal." Neutral during Siraj-ud-daula's attack on Calcutta in 1756, they were forced to 'buy' his looted merchandise for Rs. 5,00,000. Mere spectators at the time of the Battle of Plassey, they later failed to recognize Mir Jafar and, in 1759-60, flirted with the Shahzada when he approached Bengal. In January 1757, the British had assured the Dutch that there would be no interference with their trade, but after Plassey, "the collection of saltpetre by the Dutch was completely stopped and that of opium, silk and cotton piece-goods made ten times more difficult," and all acts in contravention of the 1756 agreement were blamed on the Nazim's puppet government. As Director Bisdom was preparing for resistance, Clive decided to force the issue. The Battle of Biderra in November 1759 led to the complete submission of the Dutch and the convention of 1760 allowed them to retain only 125 armed men and, ordinarily, to bring only one ship at a time 'higher up than Kalpi, Falta or Mayapore.' Formerly, they were allowed freedom of trade in all commodities except saltpetre. In fact, between 1760 and 1765, they finally accepted the ascendancy of the English Company in Bengal's trade. As the servants of the English Company sent home their earnings from trade through Dutch bills of exchange, the Dutch Company was not short of capital during these years and though they lost control over the saltpetre and opium markets, their export of cotton and silk-goods increased considerably. This source of capital dried up after the Anglo-American War in which the Netherlands got involved. The E. I. Company and English private traders, now strongly entrenched in Bengal, obstructed the collection of the commodities ordered by the Dutch. Their trade gradually tapered off as they could not import any bullion nor raise fund locally. The sale of the commodities they imported also fetched very little by 1788. The trade of the Dutch in Bengal appears to have reached a dead end.

Over a period of time there was a change in the pattern of the Dutch trade in Bengal. At least down to the twenties of the 18th century they were primarily concerned with the export of raw silk and cotton and silk piece-goods. Saltpetre and opium came next in

importance in their list of exports from Bengal. By the 1740's this pattern of priorities was definitely reversed. The Dutch trade with Bengal as with other parts of India developed mainly because the products of the region could be used for the purchase of spices from the archipelago where there was no demand for European commodities. Eventually, however, the trade in the products of Bengal became an important prop of the Company's intra-Asian commerce and Bengal textiles also found a market in Europe.

Of the commodities procured in Bengal, two major items, saltpetre and opium, were produced only in Bihar. Opium, however, was occasionally procured at Hugli when, owing to some difficulty or other, it could not be purchased from its place of origin. The Indian merchants dealing in opium preferred such an arrangement and at times tried to create the necessary situation for it, because their margin of profit tended to be higher if they could sell in the competitive market at Hugli. Raw silk, another very important item of export, as also silk piece-goods were produced in the Maldah and Kasimbazar regions but from time to time part of the Company's purchases of these commodities were made at Hugli. Cotton piece-goods, often though not always the major item exported by the Dutch from Bengal, was procured from different parts of the country including the Hugli region. Besides, as the major part of the province, the town was also one of the chief emporia of trade in this item and a fair proportion of the Company's purchases was transacted here. The other items procured at Hugli *inter alia* included sugar, cotton yarn, rice and butter. The procurement of all these commodities increased over time until, by the 1840's, even the volume of the silk and cotton textiles exported by the Dutch declined to insignificant proportions. The English had by now become definitely dominant in these markets and in consequence the emphasis of the Dutch export trade had shifted to saltpetre and opium. The advantageous position of the Dutch in the saltpetre trade was lost after Plassey, but they lost the opium market to the British only after 1760. The increase in their textile exports to Europe between 1760 and 1765 proved to be a shortlived improvement.

As to the direction of the Dutch Company's trade from Bengal during the 17th and early 18th centuries, the main Asian markets for raw silk, were—Japan, the Coromandel Coast, Malabar and Ceylon; for silk and cotton piece-goods, Japan, the Indonesian archipelago, Malacca, Persia, Siam and Ceylon; for opium, Malabar, Malacca and the archipelago and for sugar, Japan and Persia. Attempts to sell piece-goods at Mocha, Coromandel and Malabar proved unsuccessful. The piece-goods sold in the S.E. Asian markets were mainly of the coarser varieties. In Europe—where the above-mentioned items, besides saltpetre found a steadily expanding market—at first fine piece-goods were in high demand; but as the

Dutch gradually lost this market to the English, they gradually developed the export of the coarser Bengal textiles to Europe. In the 1750's Europe was also the main market for the Bengal silk piece-goods exported by the Dutch. The Company's Asian factories and dependent territories in Ceylon, Batavia, Coromandel and Malacca also procured regular supplies of rice and butter from Bengal. Besides, the Bengal directorate encouraged the local traders to export rice to Ceylon, which appears to have been a deficit area.

The Dutch paid for their exports from Bengal mainly in bullion which at times accounted for as much as 98% of their total imports Since the local currency was the silver *rupia*, the bullion imported was usually silver. Quantities of gold were, however, imported whenever there was any difficulty regarding the minting of coins or regarding the supply of silver which came mainly from Japan. Gold was used in Bengal mainly for ornaments and hoarding and the demand for it was rather limited. The silver imported by the Dutch could be either sold to shroffs—which was a relatively easy course—or it could be minted, which was more profitable, but involved vexatious dealing with the local officials. Besides bullion the Dutch also imported a variety of items in small quantities, including copper, mainly for the manufacture of small coins, cloves, nutmegs, mace, sandalwood, quicksilver and vermillion from the archipelago, Malabar pepper, cinnamon and arecanuts from Ceylon, elephants from Ceylon, Queda and Siam, and shells from Maldives.

The Dutch procured the staples of their export mainly through merchant-middlemen who had to be given advance payment, varying from 50% to 100% of the actual price, for the goods ordered. Part of the procurement was carried out through *dalals* of whom there were three types: (1) those employed by the Company to collect information regarding prices and help evaluate the goods; (2) those who procured goods on a commission basis without undertaking any risk, and (3) those who helped the Company to put out orders directly to the producers. The Company also set up manufactories but no important manufactory appears to have been set up at Hugli. Whatever the original agreement with the merchant-middlemen, the actual prices paid depended on the assessment of the goods supplied by the Council of the Hugli factory. The main problems encountered were the merchants' failure to supply the required quantities according to specification in time and the efforts of the rival concerns, particularly the English Company, to buy up the goods ordered through the offer of bribes to the middlemen or the producers. The local officials' interest in commerce and their extortionate demands often created serious problems, the most vexatious of which was the custom of *farmaish*, i.e. the buying up of the entire supply of a particular commodity of some senior official through the use of his arbitrary powers.

The Dutch also had an elaborate sales organization based mainly at Hugli. The imported commodities were sold by auction or direct negotiation with the merchants or through the *dalals* or commission agents. The system of auction often led to serious difficulties as the speculative bidders could not always honour their commitments. The system of direct negotiation with the leading local merchants, on the basis of information regarding the market prices brought by the *dalals*, was generally preferred. After accepting the highest quotation, the Company proceeded to divide the market areawise among the merchants. Payment was usually made on a deferred basis, sometimes in the form of the staples of export and at others partly in cash and partly in goods. Occasionally, there was an agreement binding the Company not to release any more of the specified commodity—an arrangement which put the Indian merchant temporarily in the position of a monopolist. The Dutch also followed a careful pricing policy. Wherever the demand was inflexible, prices were kept rather high, a wider range of fluctuation being allowed in the case of commodities for which the demand was more flexible. The Company also varied the prices of its imports in different places depending on the local level of demand. This was especially true of spices which fetched much higher prices in Europe than in Bengal, and hence the margin between the sale prices in the two regions had to be kept sufficiently narrow to discourage the English from buying up what the Dutch sold in Bengal.

One important consequence of the end of the Portuguese hegemony was the increasing participation of the 'local' merchants—mostly traders from other parts of the country, Armenians and Muslim nobles, often of foreign origin—in the intra-Asian trade. The Dutch continued the system of passports but were much more liberal with it than the Portuguese, partly as a means of securing favourable treatment and partly under pressure from the local authorities. The Hugli factors were also frequently approached for accepting goods on freight on behalf of the Indian traders. Such participation in the intra-Asian trade with Dutch or English passports began to decline only in the 18th century.

The Portuguese and Dutch activities at Hugli were more than an episode in the history of the region. The river port and its hinterland, rather than some sea port, became the hub of Bengal's foreign trade mainly because they selected this area as their chief centre of activity. No doubt, their decision was prompted by the commercially advantageous position of Hugli, but there was nothing inevitable about it and whatever the initial situation, this choice was no doubt a major factor in eventually converting a narrow strip along the banks of the river Hugli into the centre of Bengal's economic and political life.

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NOTES

[1] The siege of Hugli is described in great detail in Manrique's *Travels* and Campos' *Portuguese in Bengal.*

[2] Bowrey actually writes of Hugli, but almost certainly means the neighbouring settlement of Bandel.

APPENDIX—D

LIST OF CIRCUIT HOUSE, DAK BUNGALOWS, INSPECTION BUNGALOWS, REST HOUSES, GUEST HOUSES AND DHARMASALAS

	Location	Remarks
Circuit House	Chinsura	Three suites. Electrified

GOVERNMENT DAK BUNGALOWS AND INSPECTION BUNGALOWS

Location	Police Station	Remarks
Champadanga	Tarakeswar	Two-roomed
Pandua	Pandua	,,
Tarakeswar	Tarakeswar	,,
Arambagh	Arambagh	Two suites. Electrified
Jangipara	Jangipara	Two-roomed
Balikukari	Polba	
Chandur	Arambagh	

ZILLA PARISHAD INSPECTION BUNGALOWS

Location	Police Station	Remarks
Arambagh	Arambagh	Two-roomed
Bhastara	Dhaniakhali	One-roomed
Chanditala	Chanditala	Two-roomed
Dhaniakhali	Dhaniakhali	One-roomed. Electrified
Haripal	Haripal	Two-roomed
Jangipara	Jangipara	,,
Kamarpukur	Goghat	,,
Khanakul	Khanakul	,,
Mayapur	Arambagh	,,
Pursura	Pursura	
Tarakeswar	Tarakeswar	Two-roomed
Puinan	Dadpur	One-roomed

DAK BUNGALOWS AND GUEST HOUSES OWNED BY AUTONOMOUS BODIES

Location	Police Station	Controlling Authority	Remarks
Champadanga	Tarakeswar	D.V.C.	
Tribeni	Magra	Bandel Thermal Power Unit	

List of Circuit House, Dak Bungalows, Inspection Bungalows, Rest Houses, Guest Houses and Dharmasalas—*Contd.*

Government Rest Houses

Location	Police Station	Remarks
Inchura	Balagarh	
Singur	Singur	
Champadanga	Tarakeswar	
Mallikpur	Dhaniakhali	

Guest Houses, Dharmasalas and Rest Houses Maintained by Private Organizations

Location	Police Station	Controlling Organization	Remarks
Kamarpukur	Goghat	Ramakrishna Math and Mission	Several suites. Electrified.
Tarakeswar	Tarakeswar		
Ratanpur	Singur		
Kamarkundu	Singur		
Enayetpur	Haripal		
Baladbandh	Haripal		
Bajitpur	Tarakeswar		
Loknath	Tarakeswar		
Goswami Malipara	Dadpur		

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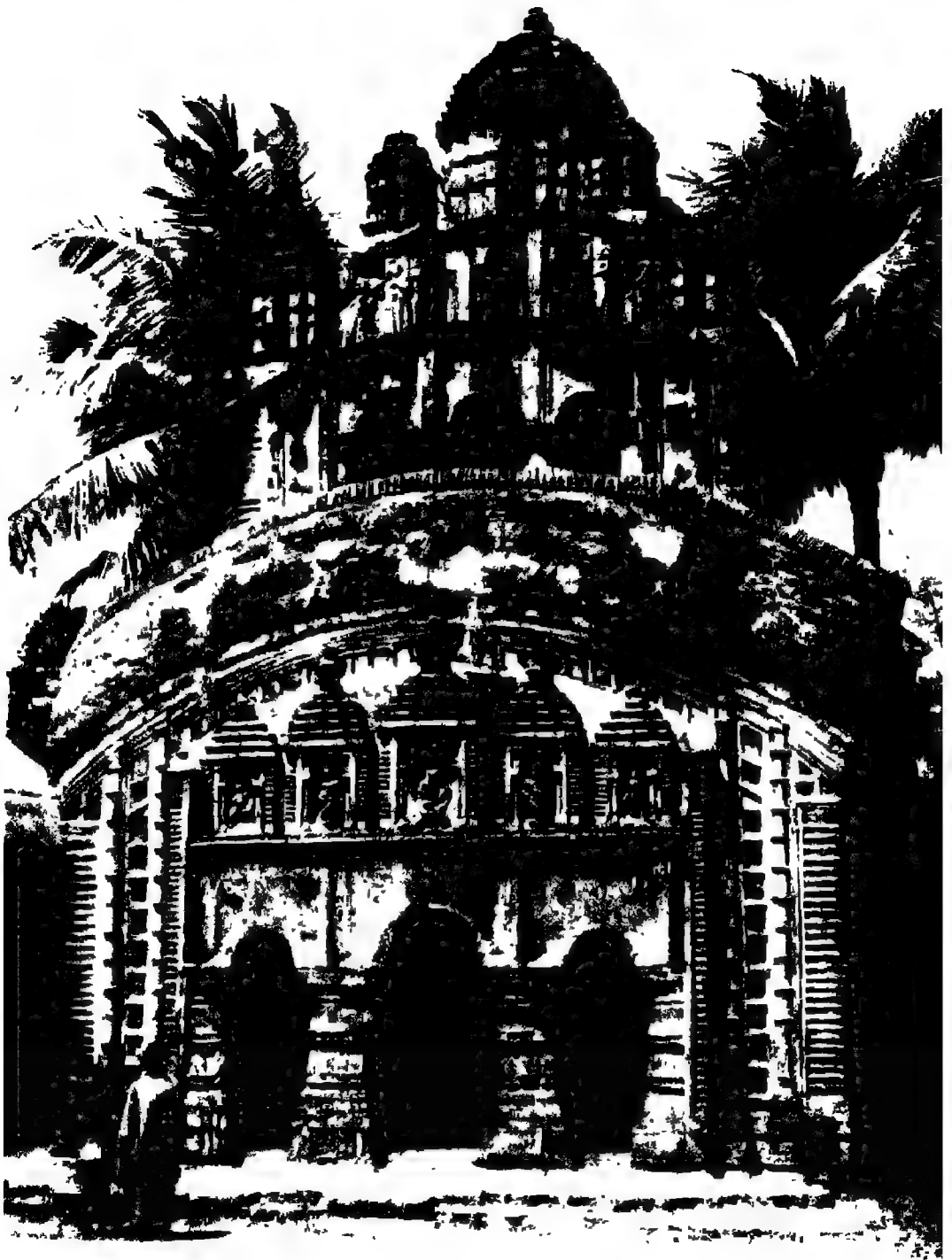
(Above) Rādhā-Govindajiu temple, Ātpur. (Below) A terracotta panel from the same temple.

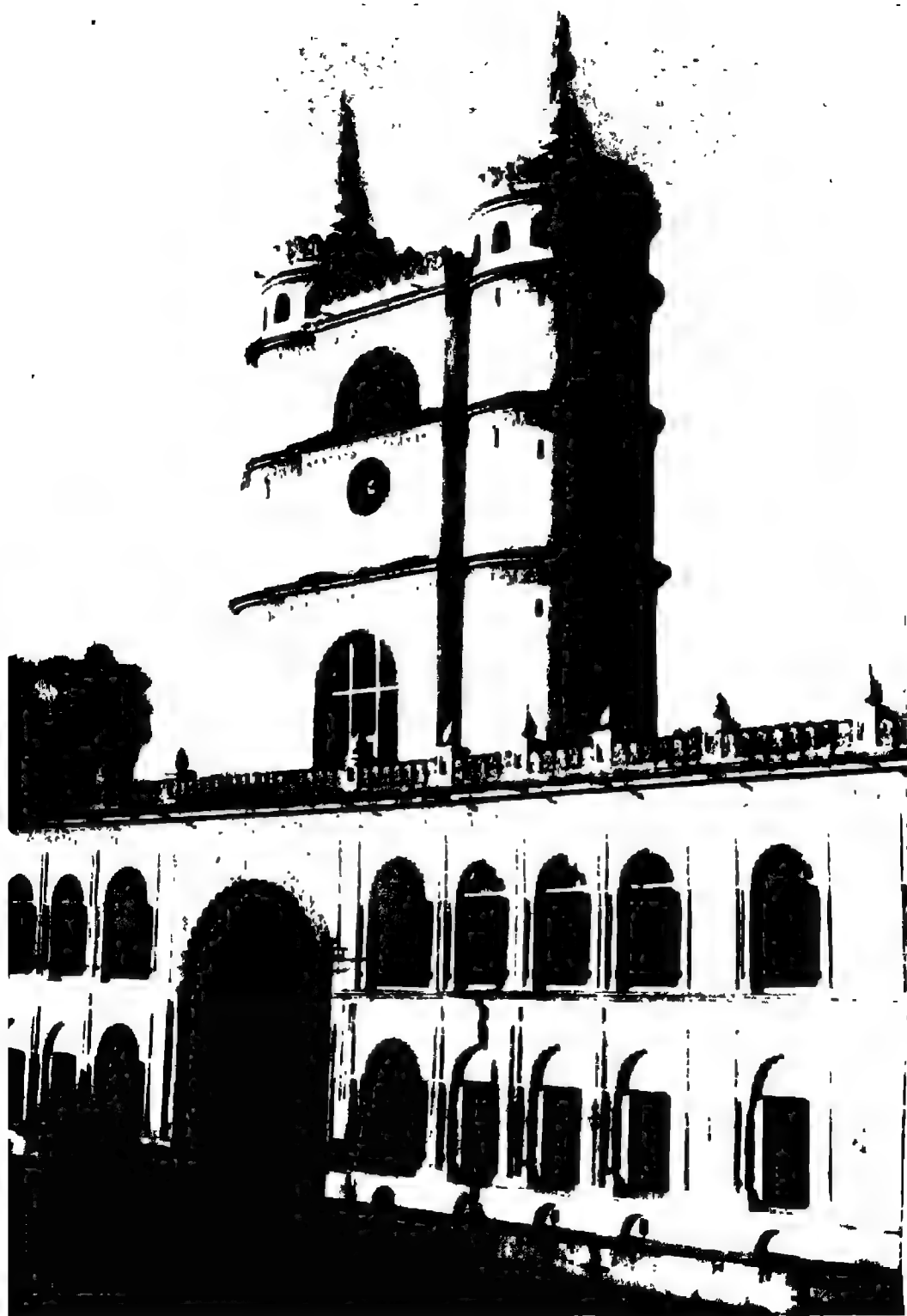
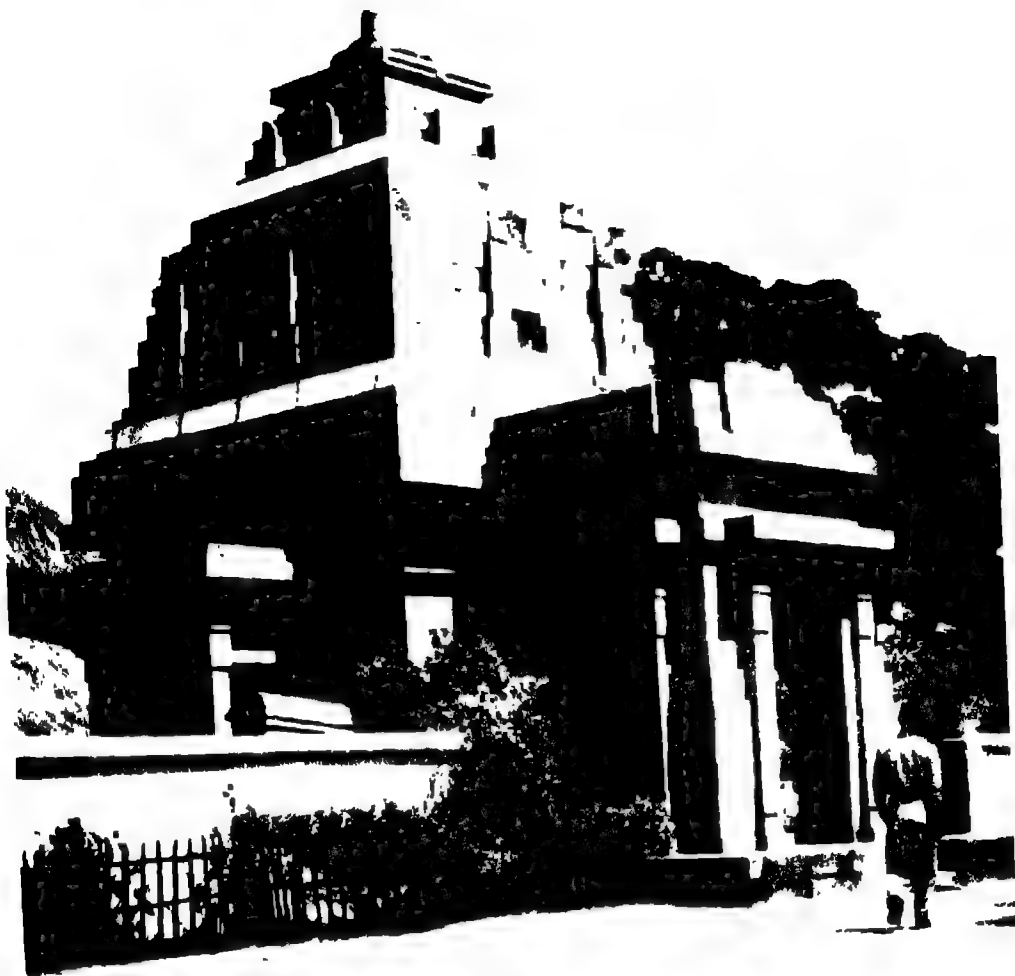
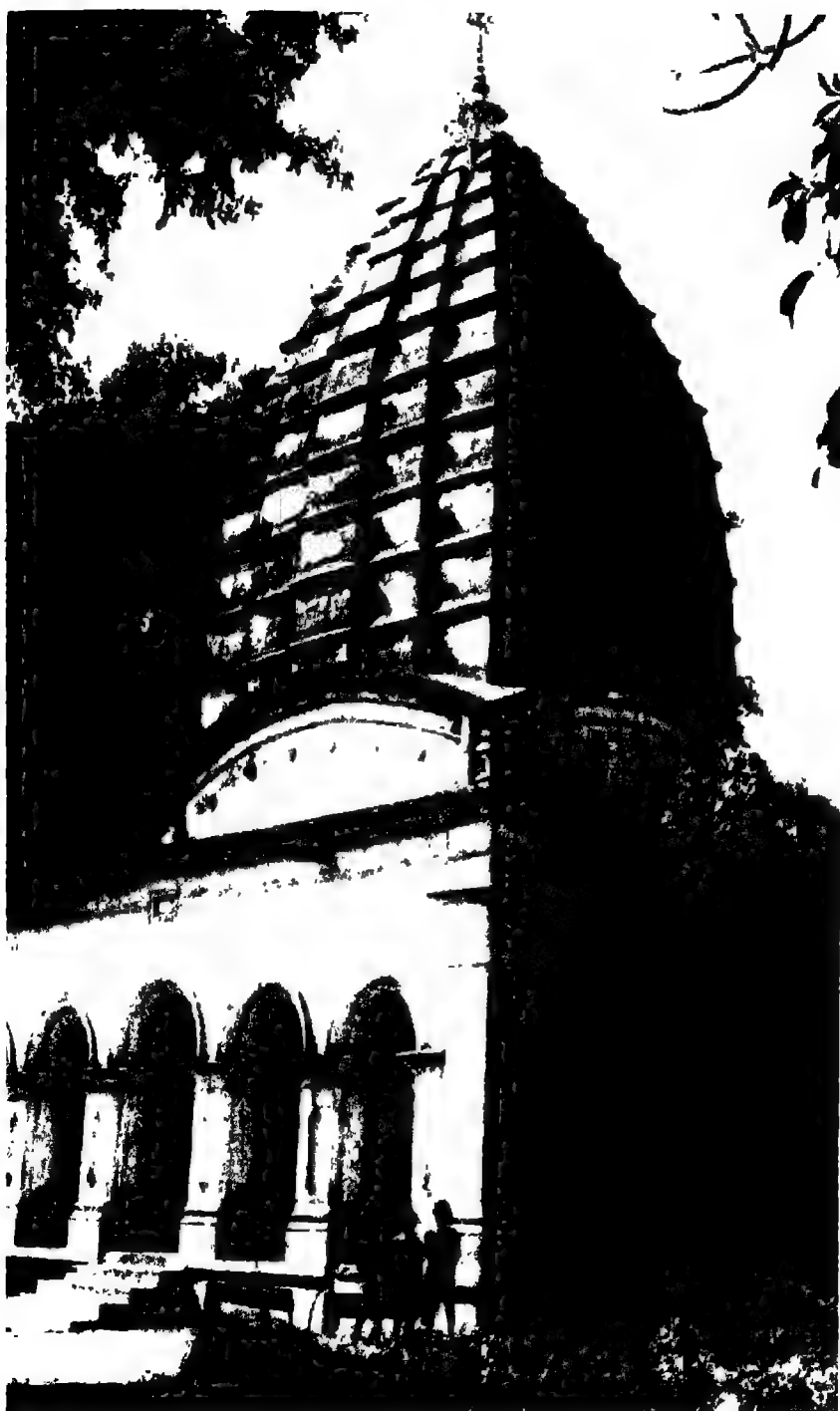
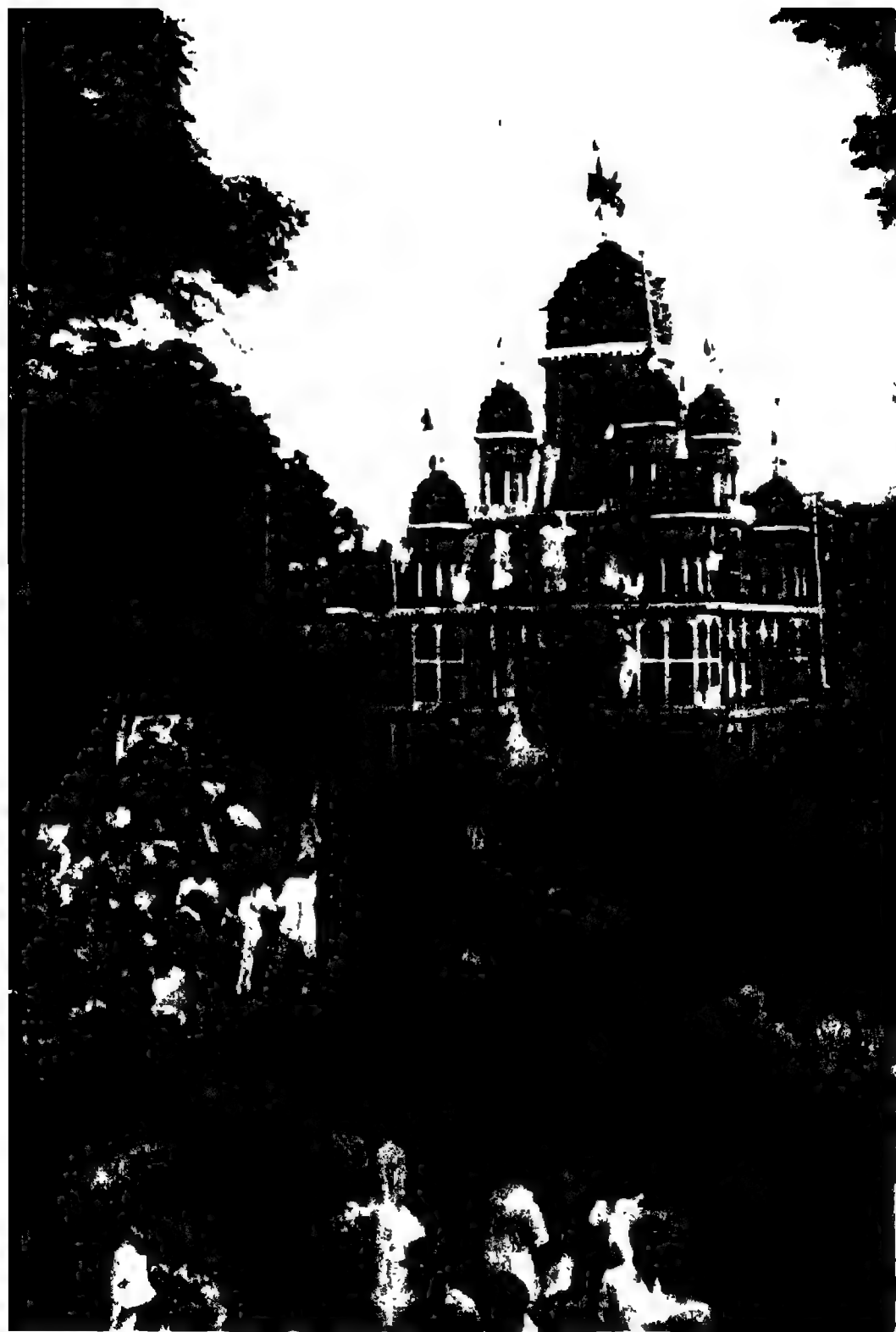
Terracotta panels from the Rādhā-Govindajiu temple, Ātpur which is one of the finest of its kind in West Bengal.

A unique Jor-banglā temple with a nava-ratna tower Bāli-Dewānganj

Bandel Church: the oldest extant church in West Bengal.

The Hamseswari temple at Bansberia noted for its unusual architecture.

A colossal image of Jagaddhatri from Chandernagore.

Tomb of Hazrat Maulana Abu Bakr Siddiki: Furfurā.

(Above) The oldest Jor-bānglā temple in the district: Guptipara.
(Below) Terracotta panels from the Ramachandra temple: Guptipara.

Entrance and clock tower of Imambara, Hooghly.

Modern stone temple at Kamarpukur marking the birth-place of Shri Ramakrishna Paramahansa Deva

Renovated Jateswarnath temple: Mahanad.

Ceremonial drawing of the Wooden chariot of Jagannathdeva at Mahesh.

Brick Tower of Muslim origin: Pandua.

The famous Siva temple, Tarakeswar.

(Above) The tomb of Jafar Khan Ghazi.
(Below) Old mosque in the same precincts: Tribeni.

INDEX

(**Key:** ā=আ | आ; ŏ=ওঁ | ओँ; ā̃=আঁ | आँ; ṁ=ং | ं, ṅ=ঙ | ङ; ch=চ | च; chh=ছ | छ; t=ত | त; ṭ=ট | ट; ṭh=ঠ | ठ; ḍ=ড় | ड़; ḍh=ঢ় | ढ़; s=স, শ | स, श; sh=ষ | ष)